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Understanding Skills Training and Development: A Program Evaluation of Nontraditional High School Internships

DeAira Handugan
Concordia University - Portland

Concordia University–Portland

College of Education

Doctorate of Education Program

WE, THE UNDERSIGNED MEMBERS OF THE DISSERTATION COMMITTEE

CERTIFY THAT WE HAVE READ AND APPROVE THE DISSERTATION OF

DeAira Rose Handugan

CANDIDATE FOR THE DEGREE OF DOCTOR OF EDUCATION

Brianna Parsons, Ed.D., Faculty Chair Dissertation Committee

Margaret Boice, Ph.D., Content Specialist

Bill Boozang, Ed.D., Content Reader

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DeAira Rose Handugan

Concordia University–Portland

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Brianna Parsons, Ed.D, Faculty Chair Dissertation Committee

Margaret Boice, Ed.D, Content Specialist

Bill Boozang, Ed.D, Content Reader

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Abstract

This dissertation in transformational leadership is original, independent research contributing new knowledge regarding high school internships as a workforce development strategy. Youth must continuously develop their knowledge and skills as the complexities in the workplaces continue to evolve. “Youth employment matters” (2014) found a persistent skills gap in academic achievement between children in the United States and their counterparts in other countries. The solution begins by engaging the younger generation, ideally prior to high school graduation. The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees in three NAM Future Ready pilot internship sites, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The study supported existing literature on the importance of work-based learning, identified specific experiential learning elements that affect student skill development and self-efficacy, and pioneered new research and recommendations for high school internships as a workforce development strategy. The research findings provide knowledge that applies and contributes to the understanding and improvement of essential skills development in educational practices, policies, and theory. A collaborative approach to experiential learning leads to the development of essential skills needed in the workforce and will result in the United States being highly competitive in a global marketplace.

Keywords: internship; high school; work based learning; education; workforce development; skills

Dedication

This dissertation is dedicated to anyone who persevered obstacles in accomplishing their goals.

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Thank you to my advisor and committee who provided their guidance, wisdom, and feedback through this journey. Thank you to my colleagues who have been encouraging and supportive of this research. Thank you to my family for instilling me with values and determination to pursue my goals. Thank you to everyone who supported and believed in me even when I did not believe in myself. Without you, I would not be the person I am today. I could not have accomplished this without you, and I am beyond grateful to be surrounded by such understanding, patient, and encouraging people in life. I appreciate each and every one of you.

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Chapter 1: Introduction

If the United States is to experience a rebirth of productivity, competitiveness, and family well-being to maintain its standard of living or position as a leader of nations, a trained workforce is vital ("Learning partnerships," 2014). Further, it is essential that high school education be examined for gaps between learning, growth, and workforce placement. One area to consider is that of skills development and what are termed essential skills or soft skills. These interpersonal and intrapersonal skills are critical characteristics professionals need in addition to technical skills for competitive advantage in the marketplace (Bancino, 2007). These skills include: interpersonal communication, problem-solving, critical thinking, technical aptitude, presentation, leadership, teamwork, creativity, and innovation (Eden, 2014; McCale, 2008). While some consider essential skills intangible, these skills are often requirements that drive tangible and measurable increases in personal productivity (Bancino, 2007). These non-standardized, diverse, and adaptable skills and attitudes are needed to increase employability. More than obtaining a degree or gaining technical skills, employability is the process of developing one's identity, including skills, qualities, values, and relationships (Eden, 2014).

Companies in the United States cannot accept an undereducated and undertrained workforce if they want to be globally competitive and retain a position of leadership in today's fast-paced, global marketplace. Unemployment in the United States affected over 5.75 million people from July 2015 until 2016 (Gillespie, 2016). As of May 2018, the unemployment rate dropped to 3.9%, but was accompanied by a shrinkage in the labor force and a fall in labor force participation from 63% in February 2018 to 62.8% in April 2018 (Sri-Kumar, 2018). The decrease in unemployment rates did not factor in those who hold multiple jobs or those who want to work, but do not believe they have the skills for the jobs available (Sri-Kumar, 2018).

Economists expect that low unemployment will lead to increased pay for workers as employers fight over the dwindling number of candidates because they have a hard time finding good workers (Kitroeff, 2018). This is directly related to an increase in global competition and the changing nature of technical jobs, making soft skills necessary rather than simply desired (Bancino, 2007).

Background, Context, History, and Conceptual Framework of the Problem

Historically, technical skills were the only required skills for employment; however, 21st century demands have indicated that they are no longer enough to retain individuals as employees when organizations downsize or cut positions (Ayuningtyas, Djatmika, & Wardana, 2015). The U.S. faces an important choice between a path which leads to increased competitiveness, higher standards of living, and a strong presence in the international community; the other leads to economic decline ("Investing in People," 1989). It is increasingly important for businesses, educators, and policy makers in the U.S. to create solutions and interventions that directly aim to provide a more skilled and career-ready workforce to the global economy.

For a company to be competitive in the global marketplace, it is vital for the company to invest in essential skills development of current and future employees. Wilhelm, Logan, Smith, and Szul (2002) found the nature of business and educational partnerships is changing; the most successful partnerships no longer concentrated on specific activities but strived for sustainability and focused on areas related to competitive changes in the workplace that drive a learning economy. A critical time for essential skills development is during the high school years, when students are rapidly maturing toward adulthood, learning the key skills that prepare them for college and careers, and if given the opportunity, develop a much deeper understanding of the

community and world around them ("Youth employment matters," 2014). When high schools are designed for the 21st century, there are opportunities to create an innovation economy where economic growth is centered on technology, entrepreneurship, and innovation. In an innovation economy with significant growth in high-wage fields of science, technology, engineering and math (STEM), the role of high schools is more important than ever (Rodriguez, 2015). An internship experience is often used to help students make the connection between their academic studies and the essential skills needed in the world of business (Hergert, 2009). NAM Future Ready pilot internship program offer unique and exclusive internship opportunities that enable high school interns to gain experience in an employer setting, participate in professional skill-building workshops, and collaborate with mentors to complete a project of value to a well-established company.

This chapter describes the gap in essential skills employers are seeking in current employees or future employees. In the past, employers focused more predominantly on technical skills related to the position, but now there is a greater emphasis placed on essential skills in combination with technical skills. The chapter addresses challenges associated with effective work-based learning experiences, describes the purpose of the program evaluation, presents questions addressed by this desk review, and includes operational definitions of terms relevant in this study. This program evaluation explored both student experiences and skill development gained during their participation in a NAM Future Ready pilot internship program to identify the significance of high-quality and well-structured internships as a workforce development strategy.

Experiential learning is rooted within constructivist theory. Constructivism, or constructivist theory, postulates students learn by actively constructing their own knowledge (Fosnot, 1996; Von Glaserfeld, 1996). Dewey (1938) claimed genuine and impactful education

happens through experience. Dewey did not use the terms *experiential learning* or *work-based learning*, but he did describe the principle of continuity of experience. Every past experience influences the actions and perceptions of current experiences, which in turn influence future experiences (Dewey, 1938, p. 27). Wood (1995) claimed that constructivism offers a potentially powerful way to rethink educational practice.

As a student and as an educator, internships, when structured as an educational practice, have had an impact on my students and my own development of personal growth and applying knowledge from the classroom into a workplace. As a former high school educator, I encouraged my students to pursue internships to better prepare themselves for the future workforce. Learners should be exposed to materials, experiences, and situations from which they can inductively build their own knowledge (Schcolnik, 2006). As an education practitioner who designed an internship program, I strive to create a high-quality experience including a structure and sequence of activities that influence significant student learning outcomes. The basis for my research in this program evaluation was driven by my desire to continuously improve experiential learning opportunities for students.

Statement of the Problem

Research has shown that the ability to work with others, communicate effectively, solve problems, and to demonstrate initiative, as well as self-direction and a positive work ethic are among the soft skills most demanded by employers (McCale, 2008; McCorkle, Alexander, Reardon, & Kling, 2003; Wilhelm et al., 2002). Youth must continuously develop their knowledge and skills as workplaces have become more complex and require critical thinking and social skills. The skills critical for success in the 21st century workforce are the same skills needed to be a competent and contributing citizen or family member (Hamilton & Hamilton,

2004; Levin, 1994). Students need to possess and maintain these skills to be successful in college, be professional in the workplace, contribute positively to the economy, and continuously develop on a personal level. Students can gain these skills through work-based learning activities prior to entering the workforce.

Work-based learning and experiential learning, such as internships, involve employer or community partners collaborating with educators with the purpose of integrating and exposing students to essential skills in the workplace. Cochran and Ferrari (2009) stated, "The importance of preparing youth for success in knowledge economy of the 21st century must not be underestimated" (p. 21). Through a series of work-based learning activities, students learned about various careers, analyzed organizations and the workplace culture, and became introspective about their own personal development. Sides and Mrvica (2007) argued that internships can help students prepare for professional roles and meet the tangible expectations that graduates are fully prepared to enter the workplace.

Unfortunately, the current emphasis on workforce preparation has created internships that frequently function more like employment than like learning experiences (Keller, 2012). Many companies offer internships to college students as a strategy to develop a pipeline of skilled workers. According to the National Association of Colleges and Employers (NACE), over 85% of employers offer internships to support full time hiring programs (as cited in Keller, 2012). Coco argued internships offer businesses an opportunity to preview the skillsets of potential employees and to recruit future employees who have proven themselves as interns (as cited in Keller, 2012). These are typically career and industry specific, according to the student's degree plan. However, many high school graduates will go directly into the workforce and need to be skilled at reading and creating contracts and know how to work with others, supervise others,

deal with customers and regulations, and make difficult decisions (Berkowicz & Myers, 2017). Therefore, to increase the number of potential applicants at a company, students must engage in work-based learning experiences prior to declaring a college major and prior to selecting post-secondary education based on degree specialties. The solution begins with engaging a younger generation, ideally prior to high school graduation.

Purpose of the Study

This mixed method program evaluation explored the perceptions held by student interns and employer partners who participated in the NAM Future Ready pilot internship program. The program evaluation demonstrates which aspects of the NAM Future Ready pilot internship program are imperative and which should be discontinued, and it provides recommendations for replication or systemization. The program evaluation will assist NAM or other organizations focusing on workforce development and employee education to solve some of the biggest challenges facing education and the economy by bringing education, business, and community leaders together to transform the high school experience. According to the Partee (2010):

> All of America's children need a high-quality education to prepare them for the changing needs of our workforce and increasingly intense global economic competition. To ensure they receive an excellent public education that meets our increased expectations requires that local, state, and federal policymakers and educators invest in effective programs, personnel, schools, and services. (p. 1)

NAM's (2017) educational design ignites students' passion for learning and gives businesses the opportunity to shape America's future workforce by transforming the learning environment to include STEM infused, industry-specific curricula and work-based learning experiences, including internships with business and community partner engagement.

The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The mixed methods program evaluation provided an opportunity to discover how characteristics like program structure, content, and delivery methods could be considered more thoroughly for a high-quality internship experience for all stakeholders (Hurst & Good, 2010). To create valuable experiential learning opportunities and scale high-quality internships, research is needed to understand which elements benefit students and why they do (Brownell & Swaner, 2010). Ideally, from this program evaluation, educators and companies can partner to develop work-based learning opportunities, including internships, with focused learning outcomes, depth, and structure for high school students who are the future workforce.

The program evaluation will focus on NAM Future Ready pilot internship programs in three cities across the country; one in the Southwestern U.S., one in the Midwestern U.S., and one in the Northeastern U.S. The pilot programs occurred for three to five weeks in the summer of 2017. There were 56 interns: 20 in the Southwest, 17 in the Midwest, and 19 in the Northeast. The research was conducted by ICG, a research group hired by NAM, to learn what characteristics imbedded in the NAM Future Ready pilot programs were high-quality and replicable based on the perceptions of the interns, employer partners, and mentors involved.

Research Questions

The following questions guided this study:

RQ_1: How do Future Ready interns perceive and describe their experience in the pilot internship program?

RQ_2: What do Future Ready interns identify as important elements in the pilot program?

RQ_3: How do the employer partner staff perceive and describe their experience in the Future Ready pilot internship program?

H_1: If students participate in the 2017 NAM Future Ready pilot internship program, they will then be able to self-identify development and improvement in their own professional skill development from the beginning to the end of the pilot internship program.

H_0: If students participate in the 2017 NAM Future Ready pilot internship program, they will not be able to self-identify development and improvement in their own professional skill development from the beginning to the end of the pilot internship program.

The researcher reviewed how NAM and ICG systematically collected, analyzed, and used information to answer questions about NAM's policies and programs and how they measured their effectiveness and efficiency providing greater insights to better prepare tomorrow's leaders, innovators, and entrepreneurs. The researcher reviewed the results from the pre- and postsurveys and focus groups conducted by ICG. The researcher's primary objective was to conduct a program evaluation of a NAM Future Ready pilot internship programs to determine if the resulting skills, and developed by the student participants, coincided with the knowledge, skills, and abilities companies seek in employees.

Rationale, Relevance, and Significance of the Study

The results of this study may provide students, educational leaders, the business community, parents, and state and local governments with insights on how and to what extent elements of a NAM Future Ready pilot internship program can be beneficial to enhancing essential skill development in a nontraditional educational setting. Jobs and internships are not all the same, and not all adolescents experience work in the same way. Individual and community differences influence adolescents' experiences, the reasons young people enter the workforce, their working conditions, the kind of work they do, and what they gain from it (Cochran & Ferrari, 2009). Inkster and Ross (1995) claimed that when internships were intentionally framed and developed as a learning activity, they typically involve a three-way partnership of student, host organization/employer, and the academic institution. The long-standing achievement gaps among U.S. students of differing ethnic origins, income levels, and school systems, representing hundreds of billions of dollars in unrealized economic gains, must be studied to effectively eliminate the skills gap and enhance the nation's competitive position in the global economy. "Youth employment matters" (2014) found a persistent gap in academic achievement between children in the United States and their counterparts in other countries deprived the U.S. economy of as much as $2.3 trillion in economic output in 2008.

Youth Employment Matters (2014) argued these gaps underscore the staggering economic and social cost of underutilized human potential. Yet they also create room for hope by suggesting that the widespread application of best practices could secure a better, more equitable education for the country's children, along with substantial economic gains. Additionally, this study provides a breakdown of which essential skills can be developed through an internship that could lead to closing the academic or skills gap.

Definition of Terms

Essential skills. Skills consisting of both interpersonal and intrapersonal personality traits that are critical characteristics professionals need to acquire, in addition to technical skills, to achieve a competitive advantage in the job marketplace. Essential skills are best defined as a set of personality traits, social graces, facility with language, personal habits, friendliness, and optimism that mark people to varying degrees (Bancino, 2007). Ayuningtyas, Djatmika, and Wardana (2015) described being analytical, having strong verbal and written communication, and exhibiting leadership, teamwork, hard work, discipline, self-motivation, and initiative as essential skills.

Work-based learning experiences. According to NAM (2015a), work-based learning experiences involve employer or community partners collaborating with educators with the purpose of integrating and exposing students to essential skills in the workplace throughout a student's education. Work-based learning brings the classroom to the workplace and the workplace to the classroom. This instructional strategy provides students with a well-rounded skill set that goes beyond academics and includes the soft skills needed to succeed in college and the working world. Businesspeople guest speak in classrooms, host college and career skills workshops, and take part in mock interviews. Students can tour worksites, network with, and shadow business professionals. Work-based learning culminates in an internship that allows students to apply their classroom skills and learn more about what it takes to succeed.

Emotional intelligence. Salavoy and Mayer (1990) defined the term emotional intelligence as a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the

use of feelings to motivate, plan, and achieve in one's life. It is a measurement of one's ability to manage, understand, use, and perceive emotions.

Internships. Internships are defined as structured and career relevant work experiences obtained by students prior to graduation from an academic program (Taylor, 1988). For this study, traditional internships occur when an organization provides temporary paid, unpaid, or compensated employment to a student.

Assumptions, Delimitations, and Limitations

It is important to set parameters and recognize assumptions about the data, study site(s), and the instrumentation in any program evaluation. For the purpose of this study the researcher assumed that the respondents provided the researcher with valid information. It is also assumed that ICG, the third-party organization who collected and evaluated the data was not biased or prejudiced in the rating of respondent data. Lastly, it is assumed the respondents provided responses that were independent of the responses of others. The identities of participants were concealed, and their confidentiality preserved to ensure participants responded honestly during the study.

The researcher recognized that certain limitations were inherent in conducting this research study. The limitations were that respondents may or may not have participated in work-based learning activities prior to this program, the respondents' responses may be impacted by the amount of time or type of interactions they had with other stakeholder groups throughout the planning or implementation process, and the program evaluation was limited to the data collected by NAM and ICG, a research consultant hired by NAM. The study was delimited to three cities across the United States where corporations sponsored the pilot program and high school students who are legally able to work in the United States.

Chapter 1 Summary

To gather valuable data about work-based learning experiences like internships as a workforce development strategy, there must be greater understanding of what elements are critical to successful skill development. The connections should be clear between intended learning outcomes and high-quality practice. Research identifying program structures and processes that enhance or inhibit learning outcomes have implications for program design. The current educational system was designed in a different era and structured for a different society. To successfully prepare students for careers, all stakeholders involved in education must be knowledgeable of shifts in the world of business. When an educational system does not consistently prepare all students to be successful adults then it puts the economy, society, and polity at risk. It is imperative for experiential learning activities effectively engage and prepare all youth for success in the 21st century economy.

Chapter 2: Literature Review

In this study, a traditional internship is considered a structured career-relevant work experience where a student applies the college and career preparation learned in the classroom prior to graduation (Taylor, 1988). Internships allow students to apply work-readiness and academic skills, as well as to learn specific occupational skills in a workplace setting (NAM, 2015a). Callanan and Benzing (2004) found other terms associated with internships in research literature include work-integrated learning, experiential learning, practicum, field experience, field work, and temporary anticipatory socialization assignments. Similarly, the NAM Future Ready internship program was a new, innovative internship program conceptualized to scale high school internships across the country to ensure a higher volume of students gain the essential skills necessary to be successful in college and career. There are three driving forces behind leaders' increasing demand for a broader skill set from professionals: necessity for improvements to the bottom line, increasing competition, and globalization (Bancino, 2007).

This chapter reviews formative literature of how essential skills of U.S. employees compare to other countries in the global marketplace and how companies currently provide on-the-job training. Additionally, this chapter examines high school internships as an approach to building a preemployment pipeline of trusted, skilled workers, as well as education reform where companies collaborate with high school career academies to teach essential skills in a variety of experiential learning. This chapter includes an overview of current internship conceptualizations, a description of Future Ready internship concepts as a workforce development strategy, and an exam of the stakeholders most influenced by internships including employers, schools, and students. Significant discussion continues around the concept, purpose, structure, and function of internships (National Association of Colleges and Employers, 2011). This chapter concludes

with how internships can be better understood in preparing students with 21st century business skills.

Conceptual Framework

The conceptual framework for this dissertation derives from perspectives developed through progress in my profession and reflects the lack of preexisting literature on the subject. As an education practitioner and former high school teacher, my approach to this research centered on a deep care for students as the future of the world. I, along with countless other researchers, believe the integration of essential skills into high school education is fundamental for students to be successful in their future careers.

In a highly competitive global marketplace, essential skills are more important than ever as business leaders across the world are establishing essential skills as an expectation of employees. Attitudes and skills needed in professions are not just technical, but are diverse, adaptable, intuitive, and innovative in nature (Eden, 2014). Historically, technical skills (also known as hard skills), have been necessary skills for career employment, but employers know technical skills are not enough to keep individuals employed (Ayuningtyas, Djatmika, & Wardana, 2015). Essential skills are the most appropriate learning to prepare students to be competent and competitive in the world of work.

In March 2016, Gillespie (2016) found a near record of 5.75 million jobs were available in the United States, just shy of the all-time high of 5.78 set in July of 2015. Figure 1 illustrates an increase in job availability between November 2015 through March 2016 (Gillespie, 2016). In June 2018, The Bureau of Labor Statistics stated there were 6.7 million available jobs. In 2016, Gillespie claimed employers had a more difficult time finding qualified workers. Two years later, in May of 2018, Kitroeff had the same concern, claiming the job market had become even

more competitive with a decline in the unemployment rate to 3.9%. The job skills gap is a major reason for high numbers of part-time workers and a high underemployment in the United States (ibid, 2016). These skills are quickly becoming a requirement that drives tangible and measurable increases in productivity (Bancino & Zevalkink, 2007). Research shows essential skills as invaluable in the workforce, so the question should not be if essential skills should be taught, but how and when they should be taught.

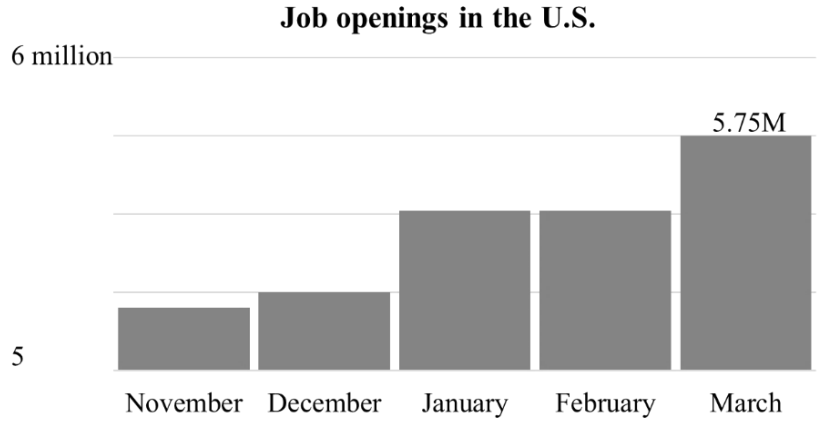

Figure 1. Job openings in United States from November 2015 through March 2016 (Gillespie, 2016).

Even though internship programs exist, there is little evidence to support the effectiveness of interns' perceptions of learning during the internship experience. "Most research relating to internships has been focused on workplace application of technical skills and job placement" (Moran, 2013, p. 11). However, there is a disconnect between the reality of internships and educational theories. Evidence linking theories with internships could help schools, organizations, businesses, and other stakeholders to understand how to best structure internships with intentional student learning and skill-building outcomes.

High-quality internships should be structured so students are able to apply knowledge learned in the classroom to real world experiences. Through the constructivist theory, Dewey

embedded experiential learning in their work (Kolb & Kolb, 2009). Dewey (1938) never used the term *experiential learning*, but he did reference how authentic knowledge and education come through experience. Under constructivism, knowledge is not seen as a commodity to be transferred from expert to learner, but rather as a construct to be pieced together through an active process of involvement and interaction with the environment (Schcolnik, 2006). Students can build their skills and knowledge through activities, workshops, or interaction with mentors throughout the internship process.

Students are developed and shaped by knowledge attained through the activities in which they are engaged, the context of activities, and the culture (Brown, Collins, & Duguid, 1989). To fine tune their knowledge building skills, students should reflect on the learning process itself so that they are aware of not just what they are learning, but also how they are learning (Schcolnik, 2006). At a minimum, students perceive that internships provide them with valuable learning experiences that supplement their coursework (Hite & Bellizzi, 1986). Understanding the relationship between an intern's perception of an internship and how the internship will impact the achievement of future career goals would help support those involved in providing and creating internships. Beck and Halim (2008) found research supporting a relationship between interns' future career expectations, the learning that occurs during internships, and their overall satisfaction with internships.

Reflection of an experience is essential in learning. "When a concrete experience is enriched by reflection, given meaning by thinking, and transformed by action, the new experience created becomes richer, broader, and deeper" (Kolb & Kolb, 2009, p. 309). Vygotsky was interested in how culture, language, and the environment formed a person's psychology. "The zone of proximal development defines those functions that have not yet matured but are in

the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (Vygotsky, 1978, p. 86). The zone of proximal development is collaborative between an educator and learner, or in the case of the Future Ready pilot internship program, between the facilitator and the intern. When an experience or program includes authentic activities, reflection, and opportunities to share ideas or values (Vygotsky, 1978), then learning and development occur for both educator and learner.

Review of Research Literature and Methodological Literature

Globalization and the growing diversity of the U.S. population have become major drivers of business practices. The U.S. labor force does not meet the needs of the country as technological change accelerates and foreign competition intensifies ("Investing in people," 1989). Consequently, businesses that diversify their workforce internalize the perspectives they need to meet the demands of the market. Millions of young Americans lack the skills, knowledge, and experiences needed to succeed in school or in the workforce. According to "Youth employment matters" (2014):

> What students learned in high school didn't prepare them for college: nearly one-third of high school graduates (31%) cannot meet any of the benchmarks for college readiness as measured by the ACT test, and about 20% require remedial courses in college. Another 34% graduate from high school but don't enroll in college, despite national efforts to increase college access, and only half of that group (51%) has a job. (p. 2)

In addition, there are significant skill shortages for businesses that rely heavily on workers with strong technology skills, data analytic abilities, and a global perspective.

In similar countries, the skills gap is decreasing, yet it continues to slip in the U.S. labor force. "The nation's slow recovery from the economic crisis of 2008–2009 has increased the

severity and consequences of the job skills gap. Between 2000 and 2011, employment rates fell to 24% for teens aged 16–19—the lowest employment rate in the country in over 60 years" ("Youth employment matters," 2014, p. 4). The Organization for Economic Cooperation and Development found that after the recession other countries such as Russia, Japan, and Korea, concentrated more efforts on skill development, racing ahead to build skills while the American skills set has maintained the same level as before (Porter, 2013). The skill diversity of employees in other countries will overtake the United States in all competitive challenges unless there is a change in how the U.S. prepares youth for the workplace. One possible approach to promote transformational learning is the integration of technology into education. This type of integrative education changes lives, families, communities, and ultimately, nations (Weatherby, 2007). "81% of high school dropouts . . . said that having real-world experiences that connected school with work would have helped keep them in school" ("Youth employment matters," 2014, p. 4) Providing authentic experiences through programs like internships offer a way to act on this urgent problem before young people disconnect from school and jobs.

A well-educated workforce is critical to the nation's economic and social well-being in today's global economy (Sanoff, 2003). This relationship was further argued in an April 2002 Educational Testing Service report stating that if the U.S. workforce literacy levels matched those in Sweden, where the percentages of workers at the lowest literacy level is only one-third the U.S. percentage, the U.S. gross domestic product would rise by $463 billion and its tax revenue by $162 billion (Sanoff, 2003). "Youth employment matters" (2014) stated:

> Each young person who disconnects from school or work costs an estimated $704,020 over his or her lifetime in lost earnings, lower economic growth, lower tax revenues, and

> higher government spending. For all disconnected youth in this country, the aggregate taxpayer burden is $1.56 trillion and the social cost is $4.75 trillion. (p. 4)

From an economic perspective, the opportunity costs of disengaged youth are staggering.

Additionally, research has shown that a positive connection between business and the community is one component of a successful business strategy for employers ("Youth employment matters," 2014). Employers find that internship experiences enhance the organizational commitment of current and new employees and create a pipeline to more mature potential employees (Hurst & Good, 2010). Organizations acting as good employer citizens and providing a deeper contribution to society and the local community is a key business interest. Internships provide employers with quality part-time workers and help companies fulfill their social responsibilities (Gault et al., 2000). In turn, Gault et al. (2000) claimed employees are often attracted to companies that are committed to the communities where they reside and make a difference in the lives of others, thus improving morale and employee retention and building a talent pipeline for future recruitment.

Skills gap: Need for essential skills. Each stakeholder has their own interest and desired outcome when participating in an internship program. For employers, building a talent pipeline involves developing skills needed in the workforce. There is a widespread concern that young people enter the workforce without the skills that employers value most, such as collaboration, communication, and self-initiative, etc. (Cochran & Ferrari, 2009). Bancino and Zevalkink (2007) conducted a survey of more than 250 technical leaders who cited the biggest reason for project failure on the job is from a lack of soft skills. The job skills gap is a major reason why there are still high levels of part-time workers and underemployment in the United States economy today (Gillespie, 2016). The U.S. Department of Labor (2018) count people as

employed if they did any paid work at all during the week in which the monthly employment survey is conducted. That includes part-time and temporary work, a growing type of employment in the so-called gig economy as more Americans act as independent contractors for services (Puzzanghera, 2018). Regardless of the decline in U.S. employment rates, there are still workers that have not been able to find jobs with full-time, secure work. Employers and business leaders, educators, government task forces, and other key stakeholders agree the nature of work has changed (Cochran & Ferrari, 2009), and addressing the widening gap between the skills employers need and the capabilities of new workers is imperative to the future.

Researchers have consistently cited the value of internships as a recruiting tool (Gault et al., 2000; Hurst & Good, 2010; Keller, 2012), yet research on how internships are structured for skills development is lacking. The lack of theory and research on high school internships and their ability to impact education, corporations, and competition in the global marketplace is surprising given the strong relationship between the skills gap and a struggling U.S. economy. "There is a growing interest from educational leaders, families, students, and communities for an entirely new way to educate students, for a reimagined way to foster, thriving, highly engaged learners" ("A transformational vision," 2015, p. 11). There is a need for research if the skills gap in the United States is ever to be closed.

Changes in employer perspective and need. This labor market is a headhunter's dream as no company can hire the skilled or unskilled workers they need without an employment agency scouring the country for any potential employee they can find (Puzzanghera, 2018). Many employers demand 4-year college degrees for jobs or only seek interns from college campuses, which narrows the number of prospective applicants and the competitive edge of the company (Puzzanghera, 2018; "Investing in people," 1989). There have been significant

differences between the U.S. education system and those of other countries; few programs are equipped to be liaisons between youth and employers or struggle to create resources to prepare students for the skills necessary in U.S. occupations ("Youth employment matters", 2014; "Investing in people," 1989). Considering high school interns to be an undertapped resource allows companies to have an advantage over their counterparts by increasing resources and developing strategies for the workforce (Wilhelm et al., 2002) that can continue through postsecondary education. "These experiences may help students identify appropriate careers well after their internship experiences have ended and their career goals have changed" (Haimson & Bellotti, 2001, p. 33). Early work experiences help young people develop a stronger sense of self-efficacy. Adolescent workers also begin to acquire work values, which create a foundation for decision making about future education and careers. In fact, many companies offer postsecondary benefits to student interns and can assist in making decisions about college and major selection.

Many businesses recruit and employ college interns to build a talent pipeline. Fewer consider employing high school students, perhaps due to the pervasive belief that high school students lack the skills and maturity to contribute to companies and integrate into company cultures. However, NAM has found this believe to be false. Employers are often pleased with the contributions that youth make (Cochran & Ferrari, 2009). There is an emerging consensus among businesses that the United States needs to increase the percentage of high school graduates who are prepared for postsecondary education and the workforce. Success requires the ability to absorb, analyze, and apply content. The driving forces behind this consensus stem from a combination of economic, societal, and educational interest. ("A transformational vision,"

2015). The future economy will need individuals ready and eager to grapple with and solve the problems of today and tomorrow.

Changes in education. Traditional high schools are poorly designed to address the economic and social demands of increasing high school graduate preparedness ("Youth employment matters," 2014). Essentially, the structure of a typical high school, built around Carnegie units and core academics, has not changed in over 100 years. Vocational education remains in place for many trades, but those trades are increasingly complex, and training beyond high school is increasingly needed. The pipeline to success for many young Americans is broken. "Fixing it will require proactive interventions that help young people become more marketable more quickly; before they disengage and fall into a hole too deep to escape" ("Youth employment matters," 2014, p. 4). Incorporating authentic work experiences into the classroom helps students connect the relevance between education and career.

For generations, the U.S. education system organized its high school programs for either college preparation or for work, but not for both at the same time. The relationship to careers in traditional college preparatory pathways is usually incidental, random, or tangential. High-quality work experience influence youth's desire and ability to succeed. Youth who work during high school, whether through a part-time job or an internship, perform better in school and are more likely to connect schoolwork with future success ("Youth employment matters," 2014). Recognizing that traditional academic programs were without career orientations and vocational programs, career academies emerged as the bridge between rigorous academics and career preparation to provide a more complete perspective to students.

Programs that provide youth with real-world work experience while still in school help participants gain necessary essential skills, such as the ability to work in teams, communicate,

solve problems, and dress and behave appropriately in a professional setting. Youth indicate that their work experiences help them take responsibility, develop time-management skills, and overcome shyness with adults ("Youth employment matters," 2014). Other skills gained include perseverance, responsibility, and self-discipline. Wilhelm et al. (2002) claimed standardized test-based admission may overlook nontraditional students' historical and cultural background that might include strengths as well as deficits related to readiness for college or career.

College-level career preparation. Students need experience with employment to learn about employability because the newness of a work experience or internship prompts learning (Eden, 2014). Taylor (1988) defined internships as, "structured and career-relevant work experience obtained by students prior to graduation from an academic program" (p. 393), which aligns with other researchers' definitions for the past 30 years. If college and high school students do not work in an internship or paid profession, they are not exposed to real work scenarios. Through real exposure, students benefit from applying learning theories to practical activities and develop skill sets needed to transition into careers (McCale, 2008). When students apply classroom learning into a nonacademic setting such as an internship, they can see the correlation between their education and a career.

Career pathway academies. Career pathway academies are built on the belief that educational attainment is not the sole ingredient of student success. Job specific skills and broader workplace abilities are equally important for long-term success, particularly in a rapidly evolving economy where updating and upgrading skills is essential to job opportunities and income. The high-level essential skills most often demanded by employers include collaboration and teamwork, communication, creativity and innovation, critical thinking and problem solving, information management, initiative and self-direction, professionalism, and ethics (Barnawi &

Anfin, 2012). These skills are the central focus of NAM internships and the basis for NAM's internship assessment, which is conducted by employers (see Appendix A).

NAM is a good illustration of the expansion of the career pathway academy movement. What began as a single academy in 1982 in Brooklyn, NY is, today, an educational design network that reaches over 95,000 students in 675 academies housed in 461 schools in 36 states, including DC and the U.S. Virgin Islands (NAM, 2017). NAM (2018a) conducted independent studies showing that students who enroll in and complete the full NAM educational design have significantly higher graduation rates than their counterparts who do not. NAM (2018a) found the following:

- NAM currently sees a 96% graduation rate among its 12th grade students.
- Students enrolled in a NAM academy in Grade 9 are 3% more likely to graduate than their non-NAM counterparts.
- Students who are enrolled in a NAM academy in Grade 9, and who were identified as at-risk of not graduating, are 5% more likely to graduate from high school than their non-NAM counterparts.
- NAM students who completed the NAM academy (4-year participation) were 6% more likely to graduate from high school than their non-NAM counterparts.
- Students who were identified as at-risk AND participated in a high-quality NAM academy program of study through their senior year (full participation) were 10% more likely to graduate than their non-NAM counterparts. (p. 1)

The body of evidence demonstrates career academy interns bring vibrancy and perspective to companies, particularly companies that want to broaden their talent pipeline and market to the young generation (NAM, 2018a). NAM academies integrate industry-vetted career

courses and a series of work-based learning experiences into traditional core academic content, so that students are well prepared to join an adult workforce, have valuable technical skills, and are better prepared than the average high school student for the workplace.

Work-based learning and high school internships. To create the link needed between the workforce and the classroom, teachers, administrators, employer partners, and government officials must get involved in work-based learning program design and delivery (Wilhelm et al., 2002). In 1989, "Investing in people" recommended analogous restructuring of schools and that much can be learned from successful restructuring of other organizations. "Youth employment matters" (2014) provided recommendations including high-quality youth workforce development programs or work-based learning experiences to provide vital support systems that young people need and can dramatically improve young people's academic, social, and financial outcomes in numerous ways.

The term *work-based learning* is based on a cooperative education (co-op) concept (Wilhelm et al., 2002) where businesses, nonprofits, educators, or other stakeholders collaboratively provide educational opportunities for students. A work-based learning continuum consists of various career awareness, career exploration and career preparation activities. The activities are intentionally sequenced to prepare students to make informed college and career choices and allow them to acquire necessary essential skills for college and career readiness. "Investing in people" (1989) stated that of all the contributions that the business community makes, the most important one is to help students understand the world of work and its relationship to classroom learning. Data from the Youth Development Study ("Youth employment matters," 2014), which has tracked 1,000 youth for nearly three decades, revealed

that youth display agency and self-efficacy as they build human capital during high school through education and work experience."

Career awareness activities. Career awareness experiences exposed students to a variety of careers through connections with business partners, which allowed them to begin identifying areas of career interest. Students achieved more fluid awareness when they observed, received information, and asked questions to acquire knowledge and relate classroom learning to real-world work and their postgraduation plans (NAM, 2015a). NAM (2015b) stated that career awareness activities typically include guest speakers, worksite tours, and career fairs.

Guest speakers were professionals who visited students in a school setting. These visits were a critical and valuable component of the curriculum and provide a foundation to a student's career awareness. Guest speakers discussed what they liked about their jobs, their typical work day, and the knowledge and skills required to pursue and be successful in their career. These visits also gave students a chance to ask questions, practice professional behavior, and elevate their comfort level communicating with professionals (NAM, 2015c).

Worksite tours introduced academy students to the professional world by familiarizing them to the environment, expectations, and requirements of the workplace, professions, and industries. Worksite tours allowed students to observe the workplace and the people working there, as well as make connections between classroom learning and the workforce (NAM, 2015c). A typical worksite tour was a one-time trip to a company or organization, normally lasting one to three hours, during which a group of students spent time with a variety of employees observing daily activities and asking questions about the company, jobs, and industry. Students completed written assignments before and after the worksite tour to connect their experiences to their classroom courses as well as their college and career options (NAM, 2015b).

Career fairs bring together business partners from a variety of careers to share information about their company, their job, and the education, skills, and knowledge required for success in their career. Students navigated the event independently, seeking additional information about careers they had already identified as interesting, as well as discovering new careers that may or may not be directly related to the academy theme (NAM, 2015c). Students had an opportunity to ask questions of professionals, practice professional behavior, and elevate their comfort level in communicating in the professional world.

Career exploration activities. Typical characteristics of career exploration activities included in-person or virtual interactions with industry or community partners, which exposed students to a range of careers within an industry and the related skills and education requirements. Activities also provided relevance to core academic and academy courses by connecting to students' interests and strengths and helping to refine and discover new areas of interest (NAM, 2015d). These experiences also prepared students with the basic skills necessary for higher intensity work-based learning experiences such as internships. The three activities for career exploration are informational interviews, job shadows, and mock interviews (NAM, 2015a).

NAM (2015d) recommended informational interviews to empower students to initiate their own work-based learning experiences according to their careers of interest. Typically, students contacted a business partner to arrange a 30-minute meeting to inquire about their industry, company, and career path. Informational interviews were normally conducted over the telephone or video conference but could also be completed in-person. These interviews helped students learn how to seek information and interact professionally with business partners and gain beneficial preparation skills for mock interviews, job shadows, and internships.

A job shadow introduced students to the environment, expectations, and requirements of the workplace. Job shadowing allowed students to observe what a real job is like and how the skills they learn in the classroom can be put into practice in the workplace (NAM, 2015d). On average, job shadowing sessions lasted four to six hours during which a student spent time one-on-one with an employee observing daily activities and asking questions about the job and industry.

Mock interviews allowed students to practice their interviewing skills through one-on-one interaction with business partners. In a mock interview, a student was paired with a business partner who interviewed them as if the student were being interviewed by an employer for a paid internship (NAM, 2015d). During this time, students practiced professional behavior and developed their comfort level in communicating with professionals.

Work-based learning can include a wide array of models, but all occur intentionally, and the primary focus is on skill and competency development. This allows the structure to support variation of learning and empowers the learner to demonstrate his or her learning in a variety of authentic settings ("A transformational vision," 2015). As young people learn through experiences, the emphasis is on mastery of the skills versus being tested and graded (Cochran & Ferrari, 2009). Through career exploration activities, students not only learn about work by observing it, but they learn by doing it.

Career preparation activity. An internship is a career preparation activity allowing for one-on-one, two-way interactions between students and business partners over an extended period, culminating in a student being evaluated by professionals using industry standards. Sides and Mrvica (2007) argued employers value internship programs for their capability to access new ideas, skills, and training for their organization and to gain more knowledge about what is

taught in academic programs. Internships allow students to apply classroom learning to practical experiences that hold value and consequences beyond school, empowering them to produce valuable work that furthers the partner organization's goals. Interns often possess content knowledge and technical skills that seasoned employees may not have (Hurst & Good, 2010). When facilitated well, an internship program is powerful and rewarding for everyone involved. An internship can generate energy and enliven the workplace, as well as inspire both employees and interns.

An internship is a culminating experience on a work-based learning continuum that allows students to apply work-readiness and academic skills, learn specific occupational skills in a workplace setting, and enhance or develop essential skills through an authentic work experience (NAM, 2015a). A high-quality internship experience includes opportunities for students to have independent exploration and practice, collaborative group work; structured, intentional instruction; and structured and cooperative play ("A transformational vision," 2015). Active learning experiences connecting young people and adults in the workplace should part of a continuum of experiences that increase in complexity and challenge in developmentally appropriate ways (Cochran & Ferrari, 2009). Internships allow students to socialize, collaborate and learn alongside peers and adults.

Future Ready pilot internship program. NAM (2018b) issued a press release regarding Future Ready pilot internship program stating the following:

> Future Ready pilot internship program (FRIs) are multi-week (between 4–5 weeks), paid internships that provide students with the opportunity to complete a project of value to the host company in a collaborative, group-based experience. NAM Future Ready pilot internship program are designed to scale the quantity of meaningful internships that

> companies can make available for students. In collaboration with an employer partner, NAM provides students with an opportunity to put their education into practice in a unique work environment. Students complete 120–150 hours in their internship, which not only requires a project of value on behalf of the employer partner, but also includes participation in skill-building workshops, exposure to higher education, and opportunities to connect with professionals who serve as mentors. This structure allows for employer partners to play a more flexible role throughout the internship process, while still meeting their need to build a diverse and skilled talent pipeline. (para. 1)

During the experience, student interns take on the roles and responsibilities of valued members of a business organization. The internship was designed to provide the student with an opportunity to learn and grow as well as to demonstrate competence and resourcefulness. The Future Ready internship provided the potential for a reference or permanent position in the future. “Having worked in a given year increases teens’ chances of being employed the following year by as much as 86%, while older youth have almost a 100% chance of being employed if they worked more than 40 weeks the previous year” (“Youth employment matters,” 2016, p. 6). Students have a smoother transition to and success in the workforce from internships. In addition, the student intern’s hard work throughout the NAM Future Ready internship helps ensure future high school interns will be warmly received by the NAM Future Ready employer sponsor.

The strength of employer partnerships affects program quality and depends on building relationships, maintaining communication, and providing guidance through an internship program. It takes a dedicated team of professionals to oversee the intern’s experience such as NAM Future Ready facilitators and NAM Future Ready mentors. The role of the facilitator is to

oversee the daily operations of the internship, and to guide interns on the NAM Future Ready project as well as discuss college and career readiness development throughout the internship. McHugh (2017) found interns were more satisfied with an internship if the process was more formal and structured with sequenced skill-building, prioritization of activities, and recurring reflection. When facilitators and mentors communicated clear task goals, the interns were able to focus attention on task activities and skill development centered on task goal accomplishments, which led to satisfaction of the deliverables and overall internship for all involved.

Review of Methodological Issues

Examining the critical skills gap serves to further underscores the importance of early intervention. Wilhelm et al. (2002) argued the challenge facing the U.S. is creating skill enhancement strategies that elevate the potential value citizens can contribute to the international economy. Closing the skills gap is essential to keeping U.S. companies competitive with companies overseas and is necessary in creating and keeping jobs in the country (Wilhelm et al., 2002). When a learning environment is implemented with a global context and community of practice, it will result in deeper learning and engaged learners (Lin, 2015). “Learning partnerships” (2004) claimed, in order to prepare more workers for expanded international competition for jobs available now or in the future, more education, training, and skill development for current employees and future employees of the workforce are needed. Implementing an educational internship program with workplace training and skill development enhances an employer’s ability to retain interns to fill full-time positions.

To fully understand the impact high school internships have on bridging the skills gap, it is imperative to examine studies and research on a variety of other factors. Previous research on

the global marketplace, the skills gap, college and career ready preparation, essential skills, changes in education, and internship programs are critical to the design of this research study. Business, labor, and educational leaders have been coming together to articulate educational goals that reflect this convergence and have undertaken the task of identifying the skills and competencies that are required of employable personnel (Wilhelm, 2002). However, there is a deficiency in current quantitative and qualitative literature and absence of mixed-method literature on high school internships. There are no conclusions drawn from the literature regarding specific actions to close the skills gap in the United States workforce. To achieve true lasting success, silos of practice must be dissolved, unprecedented alliances must be formed, nurtured, and sustained. Sectors must work together in a deliberate and calculated manner to increase influence. Collectively, industry expectations can be met and the economy grown through upskilling American workers (Albrecht, 2011).

Quantitative research. The Society of Human Resources Management (SHRM; 2014) surveyed 4,769 college and high school students and more than 300 employers from across the United States about work-based learning experiences, including internships. They found work-based learning experiences are increasingly important for companies seeking future employees and high school students who want to get into better colleges and find future employment. 60% of employers surveyed by SHRM (2014) indicated students need to start working toward their intended careers in high school to be competitive. Ninety percent, 89%, and 83% of the employers surveyed stated high school students that had completed internship programs would

have better chances getting into desired schools, obtaining college internships and full-time jobs, and obtaining more lucrative jobs, respectively.

High school internships help students make informed career decisions and expose companies to talented youth early in their professional journeys. Employers who offer high school internships build brand awareness early, fill their talent pipelines and remain competitive in the marketplace, and support the local community (SHRM, 2014). "70% [sic] of companies say that high school students who complete their programs are either 'very likely' or 'completely likely' to eventually land a college internship with their company. And 45% said that high school internships will "very likely" or "completely likely" turn into a full-time job at their company" (SHRM, 2014, para 7). The survey found that 92% of high school students wanted new skills, 81% wanted work experience, and 7% wanted mentorship and networking during the internship. Employers who provided internships wanted to include these for youth to be better prepared to be successful working professionals.

Employers increasingly need workers with analytical skills, independent judgment, and the ability to work closely with others in complex operations (Szabo, 1993). Harris (1996) conducted a study of 40 small businesses with fewer than 50 employees in Oklahoma. Using the SCANS skills and competencies, respondents used a 10-point Likert-type scale to rate them in order of importance in a two-round modified Delphi study. The resulting data clearly showed essential skills at the top of the rankings and was consistent with Szabo (1993) and the theory that the greatest development and stability occurs when the largest number of individuals can meet changing social and economic expectations (Wilhelm et al., 2002). Table 1 shows essential skills listed in order of importance by the business respondents in the Harris (1996) study. These continue to be essential skills still sought by businesses (Albrecht, 2011; Ayuningtyas et al.,

2015; Bancino, 2007; Callanan & Benzing, 2004; Capelli, 1992; Cochran & Ferrari, 2009; Eden, 2014; Grob-Zakhary & Hjarrand, 2017).

Table 1

Essential Skills Desired by Employers

Skills	Mean Scores
Integrity/honesty	9.24
Listening	9.21
Serves clients/customers	8.77
Responsibility	8.35
Participates as a member of a team	8.35
Esteem	8.12
Sociability	8.06
Reading	7.97
Time management	7.91
Works with diversity	7.91
Speaking	7.88
Self-management	7.88

Note. Skills are listed in order of importance to employers from Harris (1996).

Two years later, Wilhelm (1998) conducted a similar study with a 5-point Likert scale that had similar findings to the Harris (1996) study. The study consisted of 24 employers in various industries and organizations. The respondents ranked essential skills as most important through three rounds of questionnaires, with integrity/honesty topping the list in both studies. Standard deviations for the highest-ranking skills and competencies were low in both studies, indicating substantial respondent agreement (Wilhelm et al., 2002). As knowledge of the gap between skills and jobs has become more widely understood, an emerging consensus that

education, business, and government must work together to eliminate the skill level variance has emerged (Wilhelm et al., 2002).

In 2013, Iannucci conducted a quantitative study exploring whether there was a statistical correlation between success factors demonstrated in a prospective employee's undergraduate college career and emotional intelligence (EI) scores. A quantitative method was chosen for this research because the variables can be operationalized in numeric form, allowing the researcher to conduct the hierarchical multiple linear regression tests to determine if EI is a predictor of dependent variables (Iannucci, 2013). The findings showed no statistical correlation between GPA, attendance, participation in extra-curricular activities, or rate of progress toward degree completion and EI scores. Further research is needed to analyze other factors as predictors of EI. The same factors Iannucci (2013) evaluated could be used with high school students or different factors such as collaborating on project-based learning lessons, participating in work-based learning activities, or being an intern in a Future Ready internship.

To date, there has not been an in-depth study comparing a myriad of high school internship programs to the skills gap in the U.S. to determine if there is a correlation. Examining the Future Ready pilot internship program's value to students can help businesses weigh priorities for engagement and efforts. Students' perceptions are an important source of information on how activities can shape skill development and career goals. Research on a statistical correlation between Future Ready pilot internship program and qualified applicants for the labor force would have an impact on the education system and who is or should be involved in preparing the next generation for success in the workforce.

Qualitative research. Development of essential skills may not be measured in education but are necessary for the workforce. In 2013, Lewis claimed that American businesses

inadequately use currently available technology to recruit new employees, therefore contributing to the high unemployment rate in the United States. He referenced the Employer Mobile Readiness Report to track the number of Fortune 500 companies that have career sites accessible by mobile devices. The Employer Mobile Readiness Report found that only one third of current Fortune 500 companies had career sites that could be viewed on a mobile device; and only 3% offer a mobile application process (Lewis, 2013). It is predicted more Americans will be accessing the internet via mobile devices than with desktop or laptop computers. Lewis (2013) recommended businesses to recruit prospective employees using social media accessible by mobile devices; thus, closing the unemployment gap in America. However, there was no supporting evidence on the report that a company's lack of mobile device capabilities had any correlation with their employment rates.

Others argue the jobs skills gap is a major reason why there are still high levels of part-time workers and underemployment in the United States economy (Gillespie, 2016; Porter, 2013; Wilhelm et al., 2002). Porter (2013) analyzed how the American labor force is dangerously behind its peers with supporting research from other countries. Before the recession began in 2008, the hiring figure, which is the percentage of positions filled from what was available, was as high as 48.1%, while at the end of the recession it had decreased to 46.1% (Porter, 2013). The report suggested employment declined since the recession from a skills deficit in the generation of employees entering the workforce.

Twenty-first century skill development and career readiness handbooks are continuously developed to decrease the skills and employment gap by high schools, school districts, and universities. Prior research has provided data about the perceived value of the internship experience, the effect of intern performance on selection and compensation, and the effect of

intern performance on the perceived value of the internship experience to employers (Gault, Leach, & Duey, 2010). Each study had different definitions of what constitutes an internship. However, each had common qualitative variables such as employer perceptions of the value of internships, responsibilities of a student intern, and how internships would be successful for all stakeholders.

Synthesis of Research Findings

Leaders of organizations and companies in the United States struggle to find qualified individuals who have the essential skills needed to be successful in the workforce. Grob-Zakhary and Hjarrand (2017) claimed, "By reframing the problem as one largely stemming from a gap in learning, we aim to link education and employment by distributing ownership of, and leadership for, the solution across the education and employment sectors" (p. 60). The skills gap has been recognized as an area needing improvement since the 1980s. "Investing in people" (1989) claimed demographic trends, technical change, and increased international competition already are creating shortages of skilled workers and an excess of unskilled workers. The lack of qualified individuals has created a skills gap and caused unemployment rates to be among the highest recorded in history. The U.S. economy, society, and polity are increasingly at risk from an educational system that does not consistently prepare all children to succeed as adults and is least effective for the children facing the greatest social and economic challenges ("A transformational vision," 2015). Without skilled workers, companies struggle to have a competitive advantage in the global marketplace.

Global competition, ethnic diversification, and technological innovations have created new expectations for the 21st century U.S. workforce (Wilhelm et al., 2002). U.S. leaders must establish national education goals and frameworks for the development of essential skills with

which state and local governments, in collaboration with educators, the business community, and parents, can develop plans for action and establish systems of measurement and incentives for success ("Investing in people," 1989). Grob-Zakhary and Hjarrand (2017) recommended creating a place for both employers and educators at the education reform table to foster deeper discussion and influence in both areas (2017).

Employers' focus on creating successful organizations has led to the realization that successful employees must have multiple forms of intelligence made up of information, knowledge, skills, and emotional intelligence, the latter of which includes emotional abilities, interpersonal skills, and the ability to deal with stress (Butler & Chinowsky, 2006). The emergence of essential skills as an employee expectation has created a disparity between workforce skills required and skills available (Capelli, 1992; Judy & D'Amico, 1998; SCANS, 1999). Multiple organizations have deemed essential skills to be important and have provided suggestions for building them in current employees. "A transformational vision" (2015) claimed the partnership offers new opportunity to facilitate engaging dynamic learning that recognizes the diversity of learning styles present in the United States. However, few studies show how to incorporate essential skills into various educational settings so the future workforce can learn them prior to reaching employment-age. If different program structures or processes enhance or inhibit valuable outcomes for students, then research to identify those conditions has important practical implications for program design (Fletcher, 1989). K–12 education does not generally assess essential skills; therefore, high schoolers may not graduate with the essential skills needed to be college and career ready.

Critique of Previous Research

High school work-based learning and internship programs remain an area in need of research and continued study because there is very little to date. Although limited in relevance for high school education, some researchers have conducted studies at a collegiate-level for career readiness and emotional intelligence, identifying correlations with variables such as GPA, extracurricular activities, and attendance (Iannucci, 2013). Iannucci (2013) conducted a multiple linear regression but found no statistical correlation between any of the academic success factors analyzed and emotional intelligence. To grow the economy, Albrecht (2011) stated, "We need to recognize the value of increasing educational efficiencies and effectiveness for organizations by using the coalition as a means to an end" (p. 19). Presently, only suggestions or guide books exist for how to build skills and close the skills gap; no research exists to support internships as a workforce development strategy.

There is a lack of quantitative research on high school work-based learning, internships, and essential skills education. Research examining how the skills gap is divided among race, gender, and/or age groups is also lacking. Studies conducted by The Bureau of Labor Statistics (2016) on unemployment rates of various age groups and industry sector are notable. Findings showed 25% of 16–24-year-old youth worked in leisure, hospitality, and food services, while 18% worked in retail and 13% worked in education or health related industries. The research included projections of unemployment rates, growing industry sectors, and comparative data between age groups and full-time employment. The Bureau of Labor Statistics (2016) and "Youth employment matters" (2014) provided comparative employment data on race, including the categories of Caucasian, Black, Hispanic, and Asian. Figure 2 illustrates the U.S. unemployment gap in 16–19-year old teenagers by race as found by the Department of Labor

(2018). As of July 2016, the labor force participation of 16–24-year olds was made up of 62.7% White, 53.8% Black, 43.1% Asian, and 56.2% Hispanic ("Youth employment matters," 2016). However, the data provided did not specify why other races were excluded from research or the variables that may impact the data, such as citizenship, undocumented pay, or socioeconomic status.

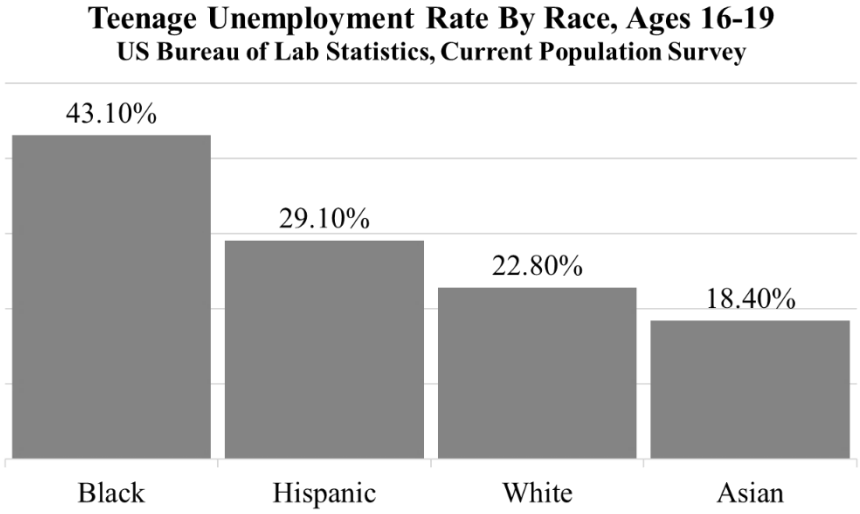

Figure 2. Teenage unemployment rate by race (Department of Labor, 2018).

The skills gap disproportionately affects some of the country's most vulnerable youth, such as minorities or those in low-income families. In 2011, the rate of unemployment or underemployment was highest for teens (aged 16–19) who were African American (60%) or Hispanic (52%) compared to their White counterparts (35%; Youth employment matters," 2014). The nation's slow recovery from the economic crisis of 2008 has increased the severity and consequences of the job skills gap. Between 2000 and 2011, employment rates fell to 24% for teens aged 16–19, the lowest employment rate in the country in over 60 years. The rate of unemployment and underemployment grew concurrently to 57% for high school dropouts and 48% for high school graduates not enrolled in post-secondary education. "Youth employment matters" (2014) found each young person who disconnects from school or work costs an

estimated $704,020 over his or her lifetime in lost earnings, lower economic growth, lower tax revenues, and higher government spending.

Chapter 2 Summary

Linking education, business, and other stakeholders through distributed leadership and ownership across all sectors can provide solutions for the learning gap. Creating and providing an education reform space for stakeholders can foster a deeper discussion and influence in this area. Employers can engage in the dialogue by sharing the kinds of activities required for employment success. Educators can share different strategies for how employers can move beyond traditional evaluation methods in assessing skills. Together, employers and educators can target innovations in pedagogies and curricula. A partnership between stakeholders offers an opportunity to recognize diversification in learning styles and facilitate dynamic learning.

There are new expectations for the 21st century U.S. workforce which stem from global competition, ethnic diversification, and technological innovations. The hypothesis of this study is based on the belief that businesses in the global marketplace can increase a diverse talent pipeline and close the skills gap by collaborating with educators on innovative strategies for high school students. The emergence of essential skills being an expectation has created discrepancy between workforce skills required and skills available by employees. This study is grounded in my understanding of high school education, career academies, and nontraditional educational strategies with business partners. The literature review revealed numerous skills needed in the global workforce and the need for strategic interventions to alleviate the essential skills gap in the United States.

Chapter 3: Methodology

The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need to close the a skills gap in the United States. Detailed in this chapter are reasons why a mixed-method approach aligned best with the needs of this study. This chapter also includes the characteristics and structure of the pilot internship program, population sampling method, data collection, data analysis details, and expected findings based on preexisting research conducted by NAM and ICG.

Purpose and Design of the Study

NAM and ICG gave permission to the researcher to use the company names and permission to analyze previously conducted research for this programmatic evaluation. The researcher conducted a desk review of the NAM Future Ready pilot program data collected by ICG International, Inc., a global consulting and technology services company hired by NAM to conduct research. These types of assessments are often completed at the end of a course or program to determine if achievement meets a standard (Wilhelm et al., 2002). The researcher used a mixed methods approach to conduct a program evaluation of the Future Ready pilot program, because this approach can reduce the potentially invalidating impacts that funding, time, and other constraints can cause (Bamberger, Rugh, & Mabry, 2006).

Program evaluation invariably involves a team, takes time to see results, involves multiple stakeholders, and is often constrained by budget and political influences (Bamberger et al., 2006). All research data and records are kept by NAM and ICG for five years. The

participants expressed their perceptions and impressions of the NAM Future Ready pilot program, which is the first data of their kind collected on high school internships by NAM and ICG. Continuous research by ICG and NAM will be conducted of NAM Future Ready internships and traditional internships to assess imperative elements that should be imbedded in all high school internship programs for skill development and a long-term workforce development strategy.

The researcher used concurrent triangulation during this mixed methods program evaluation. Concurrent triangulation is characterized by two or more methods to confirm, cross-validate, or corroborate findings (Tucker-Brown, 2012). The data collection was concurrent from ICG, meaning it was happening simultaneously and neither the quantitative or qualitative data influenced the other. The researcher used interpretations from both to provide more information and results when conducting the desk review. This mixed methods program evaluation explored the perceptions held by student interns and employer partners who participated in three NAM Future Ready pilot internship program located in the Southwest, Midwest, and Northeast regions of the U.S., through previously conducted surveys, focus groups, and internship assessments. Internships are multi-week and centered on building essential skills using a mixed methods program evaluation. Posavac (2011) defined program evaluation as:

> a methodology to learn the depth and extent of need for a human service and whether the service is likely to be used, whether the service is sufficiently intensive to meet the unmet needs identified, and the degree to which the service is offered as planned and actually does help people in need at a reasonable cost without unacceptable side effects. (pp. 2–3)

The program evaluation revealed participants' perceptions and descriptions of the NAM Future Ready pilot program and what the participants identified as important elements within the

internship. This will assist NAM or other organizations focusing on workforce development and employee education to solve some of the biggest challenges facing education and the economy by bringing education, business, and community leaders together to transform the high school experience. The researcher reviewed how NAM and ICG systematically collected, analyzed, and used information to answer questions about NAM's policies and programs and measured their effectiveness and efficiency to provide greater insight to better prepare tomorrow's leaders, innovators, and entrepreneurs.

The primary objective for the researcher was to conduct a program evaluation of NAM Future Ready pilot internship programs to determine if the resulting skills, developed by the student participants, coincide with the knowledge, skills and abilities companies seek in their workforce. The following questions drive the methodology and approach to this study:

- RQ_1: How do Future Ready interns perceive and describe their experience in the pilot internship program?
- RQ_2: What do Future Ready interns identify as important elements in the pilot program?
- RQ_3: How do the employer partner staff perceive and describe their experience in the Future Ready pilot internship program?

Identification of NAM Future Ready Internship Program Attributes

It is helpful to understand the NAM Future Ready internship program, an innovative and scalable internship concept, in comparison with a traditional NAM internship. McHugh (2017) stated, "We are just beginning to understand the ways that internships differ in design and content, and how these differences can alter the efficacy of the internship experience" (p. 376). A traditional NAM internship involves an organization developing a program for one intern or

multiple interns based on the geographic location, division or department, and the need to complete microjobs. The organization identifies tasks or projects of value to the unit or to the intern and creates a job description to provide bottom-line value to their strategic and unit goals. “Internships provide an intern with the opportunity to cultivate an attraction to the organization in terms of future job pursuit” (McHugh, 2017, p. 369). A traditional internship has a one-to-one intern to supervisor ratio where the intern shadows and assists a supervisor with tasks or projects specific to the supervisor’s unit or department.

Unlike the traditional NAM internship model, the NAM Future Ready internship program is industry-led for a student-centered experience using a group-oriented and project-based approach. In this employer setting, the business world becomes a laboratory for interns to see how the material they have learned in the classroom relates to professional application (Hergert, 2009). The employer partner is responsible for many important tasks associated with planning the NAM Future Ready program including: selecting a school district to collaborate with in developing student internship readiness, supplying the venue, equipment, and funding, providing employees serve as planning and implementation staff, and identifying a project of value for student interns to complete. In a NAM Future Ready internship program, the student to supervisor ratio is approximately 20:1. The supervisor is referred to as the program director or facilitator depending on how the employer partner decides to delegate roles. NAM provides project planning, logistical management and support, the full-cycle recruitment process, as well as training and orientation for NAM Future Ready staff. The NAM Future Ready staff includes the program director, facilitator, logistics coordinator, mentors, and content specialists. NAM notifies the school district selected about the internship opportunity, provides support for student recruitment, supports with application and interview schedule coordination and paperwork

assistance, and provides skill-building resources to ensure student candidates are well prepared and well qualified for the internship program.

Program Structure

The settings for the program evaluation were venues in three cities across the country located in the Southwest, Midwest, and Northeast regions of the United States. Employer partners specializing in finance, information technology, health sciences, and engineering piloted the Future Ready internship. NAM, a national nonprofit educational organization, established the Future Ready pilot program with an innovative structure strategically designed to increase the prevalence of internships as part of the high school experience. Each company designated an employee or team of employees to assist with the planning and implementation stages. This pilot program structure allowed employer partners to play a less time-intensive role throughout the internship process while still meeting their objective to build a more diverse and skilled talent pipeline. NAM connected industry needs with students who will soon join the workforce.

For each internship program, NAM and the employer partner(s) designed a project or process of value with multiple deliverables for student interns to complete through the multiweek internship experience. “Internships have the potential to provide students with insights into their career aspirations, advance self-concept, offer skill acquisition, and inform and revise student assumptions and beliefs about career and work preferences” (McHugh, 2017, p. 368). With McHugh’s findings in mind, the Future Ready pilot internship programs were structured with *team time* where students collaborated on deliverables, participated in professional skill-building workshops led by employer partners or postsecondary partners, connected with professionals from the employer partner organizations serving as project and professional development mentors, and learned essential skills for college and career-readiness.

The organizations who hosted Future Ready pilot internship program were cognizant that the interns would require a higher level of supervisor engagement, mentoring and support than traditional internship programs. With each program consisting of 15–25 high school students assigned into teams of four or five with one to two mentors. NAM and the employer partner assigned students into teams based on pathway theme and high school. The professionals who served as mentors to student interns were employees of the employer partner's organization. They volunteered between two and five hours each week; providing project support and professional expertise to a team of four to five student interns. McHugh (2017) found mentoring to be an important factor in internship efficacy. Mentors were a resource and thought partner for the intern team to use as they worked through their project. Russell and Adams believed mentors who provide direction and feedback regarding personal and career development are critical components to a beneficial internship experience (as cited in McHugh, 2017, p. 376). The Future Ready mentors had weekly individualized conversations with each intern focused on both personal and professional development throughout the internship program. The conversations were guided by the student's weekly self-evaluation on the internship assessment. This deliberate approach with team and mentor assignments allowed students to bring industry-specific knowledge from the classroom into the internship, while at the same time encouraging them to work with others they may not have worked with before.

The Future Ready pilot internship programs were facilitated by employees of the employer partners, NAM staff, or NAM consultants. However, not all three companies could assign employees to facilitate the entire internship program in the implementation stage. Facilitators at each NAM Future Ready internship location managed the daily and weekly schedule, sequence of activities, and overall operations and logistics of the program; oversaw

student intern project progression of final project presentation deliverables; and coordinated professionals to serve as mentors, content specialists, and/or final presentation panelists. Previous researchers have identified a strong correlation between leadership support and employee retention (McHugh, 2017). During the program implementation stage, facilitators worked full-time in the program to provide consistency for to whom interns were to directly report.

Specific elements of the program structure were consistent in each of the three Future Ready pilot internship sites such the program being a paid internship opportunity for a range of 15 to 25 student interns who complete a project of value with the guidance of mentors and supervision of a facilitator. Pilot internship program elements had similarities and differences among the three sites. The variables throughout the three locations, located in the Southwest, Midwest, and Northeast regions of the U.S., are described in the following paragraphs.

Southwestern U.S. The first Future Ready pilot program was implemented from June 12, 2017 through June 30, 2017 in the Southwest for a total of 120 hours. The employer partner hosting the Future Ready internship arranged for the program to be operated four days each week at a university campus and at their headquarters one day each week. The employer partner provided a project, mentors, materials, and marketing. The employer partner provided the indirect funding for student payments through a third-party hired as the employer of record. The Southwest-based company designated two staff members as Future Ready internship program leads to organize logistics, but not as full-time facilitators. This company asked NAM to provide

facilitators, which NAM provided. The employer partner and NAM decided to have the pilot program facilitated by NAM staff.

There were 20 student interns representing four NAM academies. Student interns assessed and provided detailed plans for a sponsored event and/or program for a large upcoming tech conference. By researching conference community connections such as SXSW, interns developed a proposal for an event aimed towards various target audiences and presented those to a group of panelists. In addition to the project, the interns also participated in a financial literacy workshop, had a guest speaker on college life, and received a campus tour because it was the primary venue of the pilot. NAM and the employer partner employed a public relation focus to the structure of the pilot program to showcase the nontraditional internship concept. The students participated in a national Future Ready internship video, professional photography sessions capturing the Future Ready program, and various interviews from media outlets, and several students presented their experience at a national conference.

Midwestern U.S. The second Future Ready pilot program ran for 124 hours from July 17, 2017 through August 9, 2017 in the Midwest. This employer partner company provided all funding and resources including, but not limited to, supervisors, mentors, venue, intern meals, materials, and venue space at their employer headquarters. In addition, the employer partner was the employer of record and issued the student payment. The Midwest-based company could dedicate two staff members as full-time internship facilitators, but NAM also had a representative on-site throughout the program implementation.

Sixteen students were selected from two NAM high schools in the Midwest area. Student interns were asked to use their creativity, unique perspectives, and abilities to challenge the norm in affecting the future of health care. The interns were provided with proven industry tools and

resources through an ideation process to deliver an innovative solution. Students participated in two projects of value to the company throughout the Future Ready internship. During the first project, student interns partnered to tell the company's story from their unique perspectives. The internship provider wanted to understand how Generation Z students viewed health care and how they viewed their company. The second project required students to work in groups of four to increase involvement in an employee nutrition and wellness program. Students used the human-centered design process to determine why the participation rate was low and designed a strategy to increase usage.

Northeastern U.S. The third Future Ready pilot program was implemented in Northeast for 150 hours from July 17, 2017 through August 18, 2017. This program had a 6-week planning window prior to implementation and multiple organizations unified to provide the pilot internship program. Two Northeast-based employer partner companies, the Northeast Department of Education, and NAM worked in conjunction to provide a Future Ready internship program. One of the two companies was willing to provide the space for a Future Ready program, resulting in the internship being hosted in this venue. However, this company could not dedicate employees for in-kind contributions. The second company could dedicate employees from their organization for the planning and implementation. The company assisted in developing the internship project topics and scheduled employees as guest speakers, mentors, and panelists. Student interns received stipends provided by the city's Department of Education, who acted as the employer of record. Neither of the two companies nor the Department of

Education could designate a full-time facilitator. This resulted in NAM hiring a temporary consultant as the full-time facilitator who would have onsite support from NAM staff.

There were 19 student interns in this program: eight students from NAM academies and 11 from non-NAM academies. Multiple case studies and a final project were employed in this NAM Future Ready internship experience, creating an opportunity for students to network and learn from employees and develop key workplace skills. The first case study focused on ethics, the second was a competitive case study to provide professional accounting and advisory services to an international accounting firm client. The interns took on the role of professionals needing to sufficiently understand the client's business and how it fits within its industry. The second case study required the team to better understand a specific airline and its surrounding business environment to create a viable strategy, competitive advantage, and long-term employer value. The final design thinking project presented students with a problem in their community and allowed them to think critically to create efficient solutions. Teams were given the same conflict, and each group presented a different solution that incorporated a technology component. The previous case studies were referenced for students to create sound, innovative, and organized solution-based presentations.

Target Population, Sampling Method and Related Procedures

The general descriptive characteristics of the population sample included: 56 student interns with an age range of 16–18, both male and female, with ethnicities including African American, Asian, Hispanic, Caucasian, and others. Collectively, participants were from 13 high schools throughout the Southwest, Midwest, and Northeast regions of the United States. The students were in career pathway academy themes including engineering, hospitality and tourism, information technology, and finance.

NAM and ICG used a purposeful sampling method during the pilot program. Hongimann (1982) described nonprobability or purposeful sampling as, “discovering what occurs, the implications of what occurs, and the relationship linking occurrences” (as cited by Kalikow-Pluck, 2011, p. 84). Convenience sampling is a form of purposeful sampling that allows the researcher to conduct a study during a specific time period and accelerate the data collection process. This form of sampling was necessary for the NAM Future Ready intern recruitment because staff were given a three to six-month planning and implementation period for the pilot program at each location. Convenience sampling is the most effective method of capturing a view of a sample population when random sampling cannot be completed due to time or other constraints (Neuman, 2003). Random sampling was unreasonable due to short-term timeline of planning and implementation of the NAM Future Ready pilot internship program leading ICG to select convenience sampling.

For this program evaluation, the researcher employed a retrospective convenience sample of surveys and focus groups completed by participants during the Future Ready pilot internship program. It was important that the convenience sampling used to gather the original data from ICG had alignment between the theoretical and conceptual frameworks of this study as this was a retrospective, mixed methods program analysis. The conceptual framework described teaching students in the context of completing a project of value for a company while being supported by a facilitator, logistics coordinator, mentors, and guest speakers in an employer setting. The theoretical framework, based on constructivist theory, provided the nexus for pragmatics, which was situated in experiential learning with students. The alignment of theory and practice provided a platform for a mixed methods approach about learners’ perceptions of their skill development and the internship program. The frameworks provided a progression from theory to

practice as the interns completed a project of value in an employer setting, which aligns with the theory of constructivism.

Instrumentation

The researcher had access to archival data conducted by ICG and NAM during the Future Ready pilot internship program. ICG used surveys and focus groups to collect data from student participants with questions pertaining to their skill development, program structure and recommendations, and perceptions of the employer partners who provided the internship program. ICF implemented a focus groups with employer partners which questions pertaining to their perceptions of the students' readiness for the program, the students' skill development throughout the program, program structure, and recommendations for future replication.

Pre- and postsurveys. A consultant for ICG sent an email to Future Ready internship program participants on the first and final days of their internship. The email contained an explanation about the purpose of the research, a link to the online survey, and the contact information of the ICG staff member for questions or further discussion prior to completing each survey. The presurveys and postsurveys were linked so the interns could be asked on the postsurvey about the specific goals that they listed on the presurvey (see Appendices B and C). The link was within the survey software, which kept responses and raw data confidential. The responses were held securely by ICG and only summaries of the data were released.

The presurvey cumulatively consisted of 18 quantitative and qualitative questions. The quantitative questions were multiple choice pertaining to the planning and implementation process of the Future Ready pilot internship program. The qualitative questions were open-ended, allowing participants to share their perceptions of various aspects in the Future Ready pilot internship program. to the presurvey. The survey cumulatively consisted of 16 quantitative

and qualitative questions; some of which contained the participant's individualized presurvey responses preloaded, so the participant could reference changes to their perceptions through the duration of the internship. The questions focused on skill development, Future Ready program structure and recommendations, as well as perceptions of the employer partner providing the internships.

The researcher used a mixed-methods approach to examine the quantitative and qualitative data from the presurvey and postsurvey. The researcher used descriptive measures or means, and a paired-sample *t* test ($p = .05$) to analyze the quantitative survey items on the presurvey and postsurvey in Excel. The qualitative responses were analyzed with inductive thematic analysis (Creswell, 2009), a form of qualitative analysis that reveals patterns or themes within the data. Using a mixed methods approach allowed the researcher to better understand variations in the Future Ready program implementation and outcomes.

Student focus groups. Interns participated in an hour-long focus group where they shared their experience in response to a series of 16 open-ended questions about their knowledge of traditional internships, participant responsibilities, challenges faced, the sequence and scheduling of Future Ready program activities, engagement with professionals, and any recommendations or comments for future consideration (see Appendix D). The ICG researcher provided name tags for each participant, accompanied with a notepad and pen to write down any thoughts. The ICG researcher used the following protocol when leading the focus group (see Appendix E):

- Introduction: Introduce yourself and/or leaders of the focus group as representatives of ICG and describe your roles in supporting the meeting (i.e., facilitator).

- Intern Assent and Parent Consent: Only interns with signed parental consent can participate in the focus group. Confirm that you have collected signed consent forms for each participating student and walk interns through their assent to participate.
- Briefly discuss the purpose of the focus group: Those sponsoring the Future Ready program would like to know what it is like to be a part of the program. Particularly, they are interested in your internship experience and how the experience affects your college and career plans. The purpose of this focus group is to collect a variety of views about the program so that information can be gathered about activities to help plan for the future. Participants can agree or disagree with comments, but only one person may speak at a time. The session will take approximately 45-60 minutes.
- Explain the confidentiality policy to each participant: (a) the focus group is voluntary; (b) you can decline to answer questions, or you can stop participating in the focus group at any time—participation will not impact you at NAM Academy or at school; (c) the information will be held in confidence to the extent permitted by law by the study team who have signed confidentiality agreements ensuring the protection of data; (d) focus group data will be maintained in secure areas; and (e) please respect others' privacy by not sharing any information outside of the focus group.
- Ask permission to record the focus group: To capture the discussion, I would like to record the session. Only the study team members will have access to the recording. If at least one person chooses not to have the focus group recorded, we will not record the session but will take notes. We will not include your name(s) in these notes. Any information that can be used to identify an intern will be removed from transcripts prior to being shared.

- Questions: Ask if they have any questions for you before you begin. Review and ask participants to sign the assent form. Parent permission forms will be collected prior to the focus group.
- Number of Participants: Each focus group should have six to 10 participants. The focus group is open to any Future Ready program interns.

Employer partner focus groups. During the final week of the Future Ready internship or the week following the internship, employer partners participated in an hour-long focus group (see Appendices F–K) where they shared their experience in response to a series of 14 open-ended questions about their perceptions of the student interns' readiness for the Future Ready program, student interns' development throughout the internship, perceived benefits for the students and employees who participated, and any recommendations or comments for future consideration. The ICG consultant used the same protocol with the employees that they used with the student interns, except for the Intern Assent and Parent Consent component. ICG ensured the responses remained anonymous from the case studies prior to the researcher's program evaluation.

Data Collection

The researcher began reviewing the preexisting data from each of the three geographic locations individually as a collective case study, which involves studying multiple cases simultaneously (Crowe, Cresswell, Robertson, Huby, Avery, & Sheikh, 2011). This provided the researcher with the opportunity to generate a broader awareness of the NAM Future Ready pilot internship program overall. After the researcher had a holistic view of the preexisting data, the researcher determined the best approach for the program evaluation was a comparative case study. Goodrick (2014) stated:

> Comparative case studies involve the analysis and synthesis of the similarities, differences and patterns across two or more cases that share a common focus or goal in a way that produces knowledge that is easier to generalize about causal questions such as how and why particular programs or policies work or fail to work. (p. 1)

The researcher used both quantitative and qualitative methods in the comparative case study to understand how the intricacies of each location influenced participants' perceptions of the internship as well as the Future Ready program outcomes.

During the program evaluation, the researcher analyzed quantitative data derived from surveys and internship assessments, while thematic qualitative data were derived from focus groups and open-ended, descriptive questions on the survey. The researcher reviewed the qualitative responses from the focus groups, the qualitative and quantitative survey responses, and the quantitative scores on the internship assessments administered by ICG during the 2017 summer. "Multi-method approaches are commonly used for the task of documenting the implementation of the program and these often become the tools to measure the program process or intermediate variables" (Sharpe, 2011, p. 73). The researcher reviewed results while taking the following factors into account: population sample size and location, instrumentation that could be replicated at a larger scale, time, cost, and convenience for participants (Sue & Ritter, 2007).

Gaps in Historical Data

In the past, NAM has not collected data pertaining to student participation in traditional internships; therefore, comparative data cannot be used to measure the success of Future Ready internships. Furthermore, students were not required to complete personal assessments on the skills they developed or on their personal experiences throughout the duration of traditional internships. Student interns also had not completed a self-assessment at the end of the internship.

Because of the historical data gap, the student experience in a traditional internship or traditional internship elements cannot be analyzed in the development of vital internship requirements to close the essential skills gap nationwide.

Unlike the structure of a NAM Future Ready internship, a traditional NAM internship concludes with a supervisor evaluating the student intern's performance level using the NAM internship assessment. NAM created the internship assessment in collaboration with major employer partners who provided essential skills they want employees to possess and consistently develop. The internship assessment includes a 4-point Likert scale on 12 areas of essential skills such as collaboration and teamwork, communication, creativity and innovation, critical thinking, problem solving, information management, initiative and self-direction, professionalism and ethics, and quantitative reasoning.

Data Analysis Procedures

The researcher was familiar with the research being explored prior to conducting the program evaluation. The researcher reviewed the preexisting data by blindly coding the transcripts and documents. The researcher agreed with the data coding ICG used in organizing the data. Through the review process the researcher identified statements or coding that required further exploration. The researcher regrouped the same codes and organized the data into new text and tables. The goal for the researcher was to present the data in a way for the reader to understand.

Quantitative analysis. The researcher conducted a series of descriptive and comparative analyses of the preexisting data. Survey data will be described in terms of mean ratings, standard deviations, and frequency tables for the participating intern groups. When applicable, the

researcher may also conduct comparative analyses such as chi-square, one-way analysis of variance (ANOVA), or *t* tests to examine differences in outcomes among intern groups.

Quantitative methods can establish the existence of potential causal or correlational relationships. Kalla (2011) described a correlational study as a way to determine whether or not two variables are correlated. The researcher noticed two variables in the research and wanted to test for correlation. The first variable was how intern participants ranked their various skill development at the conclusion of the internship program on the postsurvey (see Appendix C). The second variable was how employer partners evaluated the interns' skill development at the conclusion of the program using the internship assessment (see Appendix A). The researcher conducted a correlational study using a Kendall tau correlation coefficient for each of the skill variables that the intern and employer partner evaluated, because Kendall's tau is a nonparametric measure of the strength association between two variables. A Kendall tau correlation coefficient test shows if two variables are statistically dependent. While quantitative methods can establish the existence of causal or correlational relationships, qualitative methods can provide further insight into why the causal or correlational relationships exist.

Qualitative analysis. A qualitative research approach is a meaningful way to better understand variations in program implementation and outcomes and is often used when a complex, detailed understanding of an issue is needed (Creswell, 2007; Patton, 1980). This complex research study contains a plethora of interconnected variables. The inductive process is focused on understanding human behavior from the person's own frame of reference (Patton, 1980). The researcher used the inductive process to gather detailed and descriptive information regarding the students' experiences and development throughout the NAM Future Ready internship program from the preexisting surveys and focus group transcripts. This form of

qualitative approach was appropriate for this study, which prominently involved the constructive approach in essential skill development of the individual participants.

The researcher imported the preexisting data from QuestionPro into SPSS. The researcher took the response output and divided responses into five subscales stemming from the four items for the qualitative responses on the surveys. The data were analyzed by means and confidence intervals calculated for subscales where applicable. The researcher used *t* tests, a form of inferential statistics, for individual items. Student intern responses from the open-ended questions in the focus group and surveys were mapped using an inductive thematic approach when aligning the emerging themes with the research questions.

Triangulation of data from themed analysis, survey instruments, and focus group transcripts were employed to produce greater understanding of the Future Ready program. Guion, Diehl, and McDonald (2011) defined triangulation as, "A method used by qualitative researchers to check and establish validity in their studies by analyzing a research question from multiple perspectives" (p. 1). The researcher used data triangulation with different sources of information to increase the validity of the study. During analysis, the researcher compared responses from different participant groups in determining areas of agreement and areas of disagreement. The qualitative data and themes from the open-ended questions in this concurrent triangulation approach strengthened the understanding of the data in the Future Ready internship program evaluation.

Limitations and Delimitations of the Research Design

The researcher had access to archival data conducted by ICG and NAM on the Future Ready pilot internship program because the research conducted by ICG and NAM was done prior to the researcher doing a desk review. Research data were collected by ICG from students

willing to participate and have parents and/or guardians willing to provide consent. Prior to the start of the program, the parent(s) and/or guardian(s) of student interns were given consent forms authorizing participation in NAM Future Ready pilot program research. Thus, this research utilized a nonprobability sampling technique called purposeful convenience sampling, which naturally can have an influence over the reliability and validity of the research and the scope of its analysis. Because reliability relates to a study's ability to produce the same results on repeated trials, using convenience sampling may have reduced reliability for this research, as pure random sampling was not used. According to Kalikow-Pluck (2011), results obtained from this kind of research may not be positively repeated later with either convenience or random sampling from the same population. She explained, "The data collected will be limited to self-reported data from the respondents. The data collected will cover only a single point in time and may not necessarily be representative of the general time frame that the research will apply to" (p. 9). Considering these limitations, the purpose of this research study was not prescriptive, but rather descriptive. This research can critically inform and assist in developing a blueprint for forthcoming Future Ready pilot internship programs.

Originally, the participants were supposed to be selected from career pathways affiliated with NAM and have received support in work-based learning activities and internship preparation. Of the three Future Ready internship programs, one of the internship programs had NAM and non-NAM student interns. The non-NAM interns may not have had the same opportunities and resources in school that their NAM counterparts had to deliberately develop their essential skills prior to the internship. Without any previous NAM exposure, the non-NAM participants' perceptions of the Future Ready internship could be inconsistent with the NAM participants' views. Once the internship program ended, the non-NAM students were not tracked

or recorded in NAM's system, which means any further research will not be possible with these students.

In addition to having non-NAM students, the same Future Ready pilot internship program had another variable that the other two programs did not. NAM hired a consultant to serve as the program facilitator. Lipsey (1993; as cited by Sharpe, 2011) noted that improperly trained staff can add unnecessary variability in a program and influence the results (p. 74). The consultant was hired two weeks prior to the program implementation and had no prior knowledge of NAM, the Future Ready pilot internship structure, or the student learning outcomes imbedded in the program.

The researcher chose to focus on archival data from 2017 as it was the first year that the NAM Future Ready internship program was piloted. The study was delimited to three cities across the United States where corporations sponsored the pilot program and high school students who are legally able to work in the United States. The pilot internship program was implemented in three geographic locations which multiple variations between them. The researcher elected not to do single case study of one pilot site or a comparative case study between two who had similarities. Instead, the researcher determined a comparative case study between the three locations would provide more comprehensive data and result in highly substantial recommendations. The researcher only examined data in the archival study pertaining to the research questions and purpose of this study.

Internal and External Validity

The researcher reviewed the archival pre- and postsurveys conducted in the Future Ready program. The surveys demonstrated content validity because they were developed by ICG consultants, who are subject matter experts (SME), and reviewed by NAM to ensure all aspects

of the Future Ready pilot internship programs were covered using the appropriate instrument. Bringing in external consultants promotes effective and unbiased surveys, increasing the quality of survey results in the present and in the future (Bamberger, Rugh, & Mabry, 2006). The survey demonstrated face validity as it was developed specifically to determine the feelings and attitudes of participants towards factors that were identified by the program developers and subject matter experts as crucial to the program. An instrument that includes writing and discussing what student participants see in the workplace reveals students' preconceptions and understanding can guide the design of individualized learning strategies with real world problems (Wilhelm et al., 2002). Validity is concerned with the accuracy of the measurement, and it is often discussed in the context of sample representativeness. Instrument validity is dependent on the degree to which empirical evidence and logical analysis support the interpretations and uses of results (Wilhelm et al., 2002). ICG surveyed all participants who had parental permission in a Future Ready internship program to ensure validity.

Reliability involves the consistency of the measurement or the degree to which the questions used in a survey elicit the same type of information each time they are used under the same conditions. The surveys were developed to ask the interns their opinion of the internship rather than a psychometric instrument. Several vital components to an evaluation must be investigated for the findings to be reliable, valid, meaningful, and interpretable (Sharpe, 2011). Therefore, focusing on the survey process was more applicable than describing survey items in statistical terms.

Operationalization of Attributes

It is imperative to understand the variables when employing a mixed methods program evaluation, such as concurrent triangulation. Researchers must consider numerous variables

when measuring and analyzing outcomes of programs and interventions like internships. These include, but are not limited to, program components and complexity, services, relationships, duration of planning and implementation, and type of evaluation. To account for multiple variables and analysis needs, each of the three pilots were consistently structured to include professional skill-building workshops, exposure to various careers within or outside the company, and personal and professional mentorship. Built into this structure were differences depending on the individualized needs of the school district, employer partner, or state where the pilot was implemented.

At each location, the program implementers had direct control over the outputs, but not over the external contextual factors that may have affected the output quality. “When a project or program is implemented in many different locations, it will often be the case that performance and outcomes will differ significantly from one site to another because of the different configurations of contextual variables” (Bamberger, Rugh, & Mabry, 2006, p. 377). Different stakeholders may have opposing outlooks on the program, how it was implemented, the program developers, and the evaluation process. Through the program evaluation, the researcher gained a better understanding of the various views of student and employer partner participants on the Future Ready pilot internship program.

Expected Findings

Through the Future Ready program evaluation, the researcher anticipated student participants would self-identify learning or developing specific essential skills during the pilot internship program. Students develop perceptions not only based on what was learned, but also on the relevance and outcome expectations that can alter each student’s interpretation of learning (McCale, 2008). The researcher further hypothesized the skills students gained and enhanced

would vary between each Future Ready internship program because the project of value varied between each location. It was also hypothesized student participants would find the pilot program simulates a real work environment in terms of meeting tight deadlines, collaborating with new people, and learning how to communicate ideas. The researcher anticipated students would have a better understanding of how concepts, theories, and/or skills learned in school can be applied in the workforce, therefore becoming more prepared for a career.

The researcher anticipated the employer partner and student participants from a pilot location would identify development of the same essential skills. McCale (2008) wrote, "Students' interpretation may be different than an instructor's but still important and still provide insight into the student learning process" (p. 54). The researcher anticipated a correlation between the essential skills student participants gained or enhanced during the pilot internship program and what skills employers desire in their workforce. All participants would likely provide recommendations on how the Future Ready pilot internship program can be improved in subsequent years.

Ethical Issues in the Study

During the study, the researcher, NAM, and ICG adhered to ethical principles which included confidentiality, anonymity, and privacy (Creswell, 2007). ICG recognized that learners acting as researchers may have personal biases and encounter ethical concerns. To mitigate ethical concerns, ICG conducted the Future Ready internship research in accordance with research protocols. Researchers obtained informed consent from all participants (Gall, Gall, & Borg, 2003). All participants were informed who would be conducting the research and the time commitment required. The researcher described the research in easily understandable language, offering to answer any questions, informing participants that their involvement was voluntary,

informing participants that they were able to withdraw at any time, letting participants know the limits of confidentiality (Rudestam & Newton, 2001), and ensuring participants appeared unscathed from the research.

The researcher guaranteed a high degree of self-awareness was utilized to eliminate any preexisting biases, values, or self-interests. The researcher who performed the program evaluation of the Future Ready pilot internship program is a NAM employee, but more specifically, the NAM Future Ready Internship assistant director. The assistant director cocreated the pilot program for NAM and helped in the implementation process with all the stakeholders involved. The assistant director wrote summaries of the program, developed elements that were critical to quality for the program's future success, and started replicating the Future Ready internship program implementation process nationwide without the data being organized or analyzed by ICG. The assistant director was responsible for the success of the Future Ready pilot program, managing relationships with employer partners, ICG, and the school districts who provided the student interns. However, the assistant director did not conduct the research and was separated from any research aspect with the participants to eliminate any conflict of interest or negative impact on the study.

The researcher ensured confidentiality was maintained as all participants were deidentified in the research instruments. All information related to this study has been stored by the researcher in secure location with no shared access. It will continue to be stored for a minimum of three years, at which point, it will be destroyed. The researcher ensured all Concordia University Institutional Review Board (IRB) procedures were followed.

NAM established a timeframe for increasing the number of NAM Future Ready pilot internship programs offered. As a result, NAM wanted data and information to share with school

districts and employer partners and so they hired ICG to conduct research during the 2017 pilot program. The timeline for the nationwide launch of the NAM Future Ready pilot internship program did not align with the timing of ICG presenting their research results and so NAM moved ahead with planning forthcoming Future Ready internship programs prior to listening to recommendations. Pressure on ICG to analyze results on NAM's timeline may have affected the level of detail in the analysis. Bickman (1987) stated, "A clear program theory that has been evaluated and deemed successful will afford policy makers the opportunity to implement similar constructs to other relevant programs" (as cited in Sharpe, 2011, p. 73). NAM has an interest in this program evaluation and will want to use components of it with different audiences with whom NAM works.

Chapter 3 Summary

Using a mixed methods approach, this program evaluation examined the essence and characteristics of the pilot internship program in three U.S. locations. It was important that the convenience sampling used to gather the original data from ICG had alignment between the theoretical and conceptual frameworks of this study as this was a retrospective, mixed methods program analysis. The researcher had access to archival data conducted by ICG and NAM during the Future Ready pilot internship program. The researcher reviewed the preexisting data as a collective case study to gain a broader awareness of the pilot internship program. With a holistic view of the data, the researcher determined a comparative case study analyzing the similarities, differences, and patterns for the three locations would be the best approach. The retroactive convenience sampling resulted in 56 student participants between 16–18 years old, both male and female, representing 13 high schools across the U.S. Adding to the research sample were 26 employees from the three geographic locations who also participated in the previously conducted

research with ICG. In addition to data triangulation, the researcher employed member checking, thick descriptions, validity, reliability, and the use of reflexivity to enhance the trustworthiness of this study.

The following chapter will discuss the results from the data collected from the Future Ready pilot internship program, the data analysis, and how the methodology used by ICG successfully addressed the research questions informing this study. The triangulation design used attempted to confirm, cross validate, or corroborate findings. The qualitative and quantitative data revealed what components of the pilot program were effective or ineffective. If the program was not effective, the data would show what changes should be made in future implementation of the program. The research findings confirm imperative elements that should be imbedded in all high school internship programs for skill development and a long-term workforce development strategy.

Chapter 4: Data Analysis and Results

The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The study used a concurrent mixed-method approach with triangulation, through which multiple methods were used to confirm, cross-validate, and corroborate findings (Tucker-Brown, 2012). The study depended on understanding both the needs of employers and the experiences of the interns. The findings of the program evaluation are presented in this chapter. The quantitative data analysis reflected key programmatic components from the student interns' perspectives. Additionally, through thematic analysis, three themes, including gaining work experience and knowledge, using and improving skills, and networking with business partners and peers surfaced. The participants' personal testimonies were used to provide textual descriptions of what was experienced and what situations influenced the participants' perceptions. This chapter details the characteristics and structure of the pilot internship program, describes the study's data collection and analysis, and discusses the limitations to the evaluation. The findings of the data collection and information found in relation to the following primary research questions will be presented:

RQ_1: How do Future Ready interns perceive and describe their experience in the pilot internship program?

RQ_2: What do Future Ready interns identify as important elements in the pilot program?

RQ_3: How do the employer partner staff perceive and describe their experience in the Future Ready pilot internship program?

Description of the Sample

There were 56 interns total in the NAM Future Ready pilot internship program. Table 2 shows the combined intern demographics from each of the three pilot locations. Of those 56, 30 were male and 26 were female. Forty-four were affiliated with NAM and 12 were non-NAM. Three of the interns had graduated, 42 had completed 11th grade and were considered rising 12th grade students, and 11 had completed 10th grade and were considered rising 11th grade students.

Table 2

Demographics of *Study Participants*

Demographics	Number of Participants
Male	30
Female	26
NAM	44
Non-NAM	12
Graduated	3
Rising 12th grade	42
Rising 11th grade	11

The number of students who participated in the presurvey, postsurvey, focus group, and internship assessment are shown in Table 3. Fifty-six students were interns at the start of the NAM Future Ready pilot internship program, but not all 56 participated in each data source conducted by ICG. One student left the internship due to unforeseen circumstances. Three students did not participate in the study due to lack of parental consent, meaning the students did

not return the consent form. Four did not participate due to parent dissent, meaning the students returned the consent form, but the parent opted for their child to not be included in the research. In addition, the student participants who completed the presurvey, postsurvey, and focus group varied at each program site. All 56 interns were evaluated by their supervisor using the NAM Internship Assessment at the end of the program. Of those 56, the following participated in the study: 32 took the presurvey, 45 took the postsurvey, and 48 participated in a focus group session at their specific internship location. The student participants in the NAM Future Ready program in Northeast took the postsurveys anonymously, which meant they were not able to be deidentified by ICG. Therefore, the student participants' responses in the postsurvey were excluded from the researcher's correlational study between postsurvey responses and internship assessment.

There were 26 employees among the three Future Ready pilot sites in the Southwest, Midwest, and Northeast who participated in a focus group conducted by ICG. The employees were from the four employer partner organizations who hosted the internship. The employees interviewed had roles within the internship as mentors, facilitators, logistics coordinators, and directors. Each had been actively involved in the planning and/or implementation process. The focus groups centered on their objectives for the internship, their attitudes toward different elements of the internship, their role in the Future Ready program, and if their objectives were met with the internship program.

Table 3

Study Participants by Data Source

Data Source	Number of Participants
Presurvey	32
Postsurvey	45
Focus Group	48
Internship Assessment	55
Employee Focus Group	26

Southwest. There were 20 interns who participated in the NAM Future Ready program in the Southwest. Seventeen interns completed the presurvey (100% response rate), 17 interns completed the postsurvey (100% response rate), and 17 interns participated in a focus group conducted by ICG. Three interns did not participate in the study due to parental dissent.

Midwest. Seventeen interns were hired for the NAM Future Ready program in the Midwest. One intern quit the internship after the first day, leaving 16 interns total for the remainder of the program. Seventeen interns completed the presurvey (100% response rate), 12 interns completed the postsurvey (75% response rate), and 14 interns (87.5% participation) participated in a focus group conducted by ICG. No additional information was available to clarify if the 75% response rate on the postsurvey or the 87.5% participation rate in the focus group was due to lack of parental consent or due to parental dissent.

Northeast. Nineteen interns were in the NAM Future Ready program in the Northeast. Zero interns completed the presurvey (0% response rate), 17 interns completed the postsurvey (100% response rate), and 17 interns participated in an ICG led focus group. Two interns did not participate in the study due to lack of parental consent. No additional information was provided

regarding whether the 0% response rate on the presurvey was due to lack of parental consent or due to parental dissent.

Research Methodology and Analysis

A concurrent mixed methods approach was applied for the program evaluation. The first instrument, the presurvey (see Appendix B), contained 16 survey items with the addition of two open-ended questions that were administered electronically by ICG during the first week of the NAM Future Ready internship program. The second instrument, a student focus group (see Appendix D), was administered in person by ICG personnel with 16 open-ended questions. The third instrument, the postsurvey (see Appendix C), contained 15 survey items with one open-ended question that was administered electronically by ICG during the final week of the NAM Future Ready internship. The fourth instrument, an internship assessment (see Appendix A), contained eight survey items administered in person by the interns' supervisors.

Descriptive statistics and frequency/summary measures were generated and a paired-sample *t* test ($p = .05$) for quantitative analysis on the survey items from the presurvey, postsurvey, and internship assessment. The hypothesis was that there would be statistical significance between the ratings of professional skill development on the presurvey and postsurvey items. Inductive thematic analysis was used on the open-ended questions of the presurvey, postsurvey, and student focus group for qualitative analysis.

Quantitative analysis. The ICG surveys, as seen in Appendix B and Appendix C, contained 16 items on the presurvey, with 15 different items on postsurvey. The presurvey and postsurvey contained questions on which participants had to rate various aspects of the NAM Future Ready program along with their own skill level on a scale ranging from 1–4, with a 1 indicating strong agreement and a 4 indicating strong disagreement; a score of 5 indicated that

the intern did not know the answer to the question or it did not apply to their circumstance. The presurvey can be seen in Appendix B and the postsurvey can be seen in Appendix C. The researcher first examined the mean responses of interns' Likert scale ratings. To make the internship assessment and pre- and postsurvey responses directly comparable within subjects, the researcher reverse coded each survey response on a 1–5 scale where 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, 5 = do not know/does not apply.

The ICG team used data from the NAM Internship Assessment to rate performance outcomes for each intern (see Appendix A; ICG, 2017). The assessment is an evaluation tool that a supervisor uses to assess an intern's performance on eight constructs of core college and career ready skills (e.g., collaboration, problem solving skills, quantitative skills). NAM provides each supervisor with written directions on how to complete the internship assessment at the start of the internship and how to assess interns on each of the eight skills. The skills were individually assessed on a scale ranging from 1–4, with a 1 indicating that the intern did not meet expectations and a 4 indicating that the intern exceeded expectations; a rating of N/A indicated that the supervisor did not have the opportunity to observe the intern regarding a specific skill competency. "Likert scale: What it is and how to use it" (2019) explained that Likert scales are among the easiest and most reliable ways to measure opinions, perceptions, and behaviors. A Likert scale was chosen for this internship assessment for this reason and because it is common practice within a work setting.

Each of the eight skills was assessed on a Likert scale. In a traditional 5-point Likert scale, the strongly agree-strongly disagree continuum was used. On a traditional Likert scale, the value of 3 is often neutral, with no positive or negative opinion, but the internship assessment used the value of N/A to equal no positive or negative opinion. Unlike a traditional Likert scale,

this resulted in the internship assessment using a 4-point Likert scale ranging from 1 = Does not meet expectations, 2 = approaches expectations, 3 = meets expectations, 4 = exceeds expectations, and N/A = no opportunity to observe.

To conduct a correlational analysis between the survey responses and internship assessment, the survey responses scale needed to align with the internship assessment scale. To norm the scale for more consistency with the internship assessment, the researcher reverse coded each survey response on a 5-point Likert scale where 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree, 5 = do not know/does not apply. To create an aggregate measure of student intern skill development, scores on separate Likert-scale questions were combined to be analyzed as one. This reflected an overall average of seven separate measures that could be easily compared with others. The researcher's process will be discussed further in the quantitative results section of the chapter.

Qualitative analysis. The purpose of the open-ended questions on the surveys or focus groups were to evaluate the perceptions of stakeholders involved in the Future Ready pilot internship program created by NAM. Surveys and focus groups were administered to understand the experiences that interns had, their attitudes toward different elements of the internship, and any changes they underwent during the internship (ICG, 2017). Similar focus groups were administered to the employer partners with the same purpose of understanding their perceptions of the program. Every NAM Future Ready pilot internship program included a program quality monitoring component that used common data gathering tools to monitor experiences and outcomes and assure that experiences for participants continue to be of high quality (ICG, 2017).

The responses were analyzed with inductive thematic analysis (Creswell, 2007), a common form of qualitative analysis that manifests in pinpointing, examining, and recording

patterns or themes within response data. Inductive approaches of naturalistic inquiry are centered on how a person's own perspective impacts behavior (Patton, 1980). The researcher found that participants' ideas in the transcripts and survey responses often represented the same meaning even if the words varied by participant. The basic notions were identified in an initial coding. The responses were reread and grouped using axial coding for those notions according to the three research questions. Themes emerged as similar codes were grouped with a holistic approach. A holistic approach to research design is open to gathering data on several aspects of the setting to put together a complete picture of a program (Patton, 1980). The researcher will report multiple perspectives, identify various factors in the program, and describe the complete picture of the program.

Presentation of the Data and Results

The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The program evaluation documented the development and implementation processes of each NAM Future Ready internship pilot program as a workforce development strategy. This study examined preexisting data collected from three NAM Future Ready pilot sites sponsored by NAM and four employer partners. The presentation of results was organized by quantitative and qualitative analysis used throughout the program evaluation. The first instrument was a presurvey (see Appendix B), with both quantitative and qualitative analysis of the open-ended questions. The second instrument was a postsurvey (see Appendix C), including both quantitative and qualitative analysis of the open-ended questions.

The third instrument was an internship assessment (see Appendix A) with quantitative analysis. The fourth instrument was a focus group (see Appendix D, Appendix F, Appendix I, and Appendix K) with qualitative analysis of the open-ended questions. Any questions from the four instruments that were not relevant to this program evaluation were not explored by the researcher. For this study, questions related to the research participants' perceptions about elements of the program or the program overall were examined.

Quantitative analysis. Descriptive measures that focused on mean responses, and a paired-sample *t* test ($p = .05$) on the 31 survey items on the presurvey and postsurvey were analyzed in Excel. The survey participants were deidentified by ICG, but their responses were able to be subsequently linked. The researcher linked participants' responses for paired samples *t*-test analysis pre-lab and post-lab differences using a Kruskal-Wallis H Test. McDonald (2014) stated:

> The most common use of the Kruskal–Wallis test is when you have one nominal and one measurement variable, in an experiment that you would usually analyze using one-way anova, but the measurement variable does not meet the normality assumption of a one-way anova. (p. 157)

Nominal variables, also known as categorial variables, organize observations into distinct categories (McDonald, 2014). For this program evaluation, the researcher used two Kruskal-Wallis *H* Test; the first used the work being challenging as a nominal variable and the interns' Likert scale rating as the measurement variable. Measurement variables can be measured numerically. For the second Kruskal-Wallis *H* Test, the work examined was the nominal variable and the interns' Likert scale rating was the measurement variable.

Question 3.1 on the postsurvey asked whether interns felt their work during the Future Ready internship was challenging. Responses indicated that 14% of interns strongly agreed that the work was challenging, 61% agreed that the work was challenging, and 25% disagreed that the work was challenging. Mean scores on the Likert response scale can be seen in Figure 3. To examine differences among these frequencies, the researcher conducted a nonparametric Kruskal-Wallis *H* Test. Results indicated that a significant difference among interns' ratings was present ($\chi^2 = 7.30$, $p = .03$). The researcher conducted follow up Mann-Whitney *U* Tests, alternative non-parametric tests to confirm the researcher's initial findings. Follow up Mann-Whitney *U* Tests revealed a significant difference between the Midwest and Northeast interns, ($U = 41.50$, $p = .02$), no statistical significance between the Midwest and Southwest ($U = 63.00$, $p = .08$) interns; no significant difference was present between the Northeast and Southwest interns ($U = 106.00$, $p = .29$).

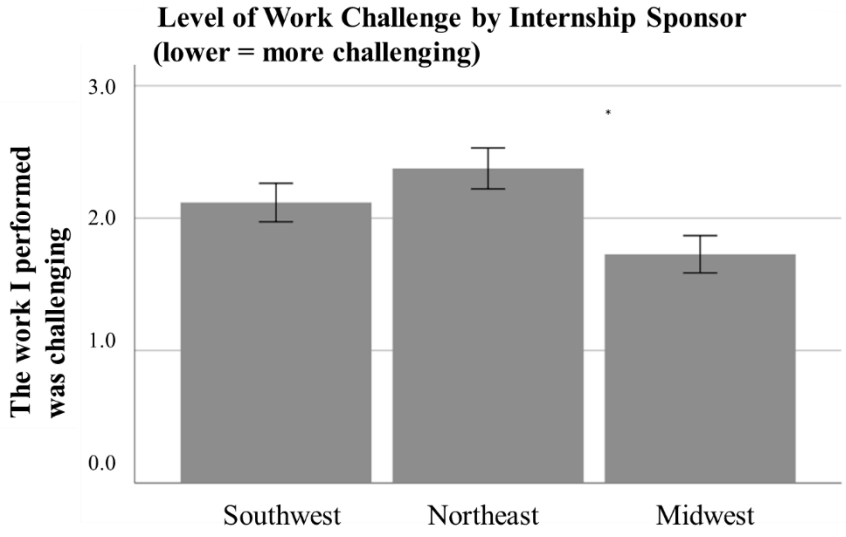

Figure 3. Level of work challenge by Future Ready pilot site.

Question 3.2 of the postsurvey asked whether interns felt their work at the Future Ready program was interesting or stimulating. Responses indicated that 39% of interns strongly agreed,

61% agreed, and 0% disagreed the statement. Mean scores on the Likert response scale can be seen in Figure 4. To examine differences among these frequencies, the researcher conducted a nonparametric Kruskal-Wallis *H* Test. Results indicated that no significant differences among interns' ratings was present, ($\chi^2 = 0.32$, $p = .85$).

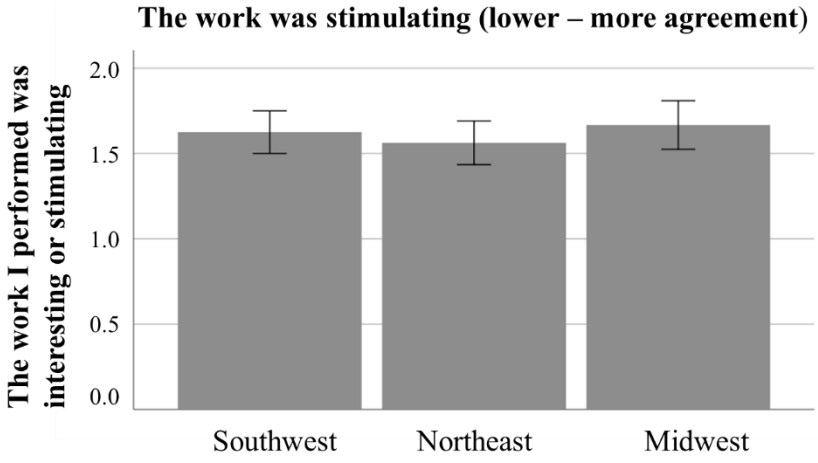

Figure 4. Level of work stimulation by Future Ready pilot site.

Each student intern in a Future Ready internship was evaluated by a supervisor on 13 skill categories at the end of the program using an internship assessment. ICG had students self-assess their individual skill development on the postsurvey. Question 5 on the postsurvey, as shown in Appendix C, asked the participants to rate their level of improvement on numerous skills, abilities, or knowledge. To accomplish this, Question 5 asked interns to think about their skills prior to and after the internship experience. The researcher examined how the 13 categories could be condensed into eight categories for alignment. While numerical data from the internship assessment, presurvey, and postsurvey were directly comparable, each instrument measured a different number of skill categories. To accommodate this difference, the 13 skill categories on the internship assessment were restructured and aligned with the eight skill categories on the

postsurvey. This ensured that results between the two instruments could be directly compared while preserving the original eight skill categories of interest.

To measure the strength of association between supervisors' ratings of the internship assessment and interns' self-perceptions on the postsurvey responses, the researcher used a Kendall tau correlation coefficient, a nonparametric correlation. In every case, the variables to be combined exhibited significant correlations with one another, so it was statistically acceptable to combine them. Table 4 shows the postsurvey items, with the variable numbers in the first column and the corresponding internship assessment categories in the second column.

Table 4

Variables in Skill Development on Postsurvey and Internship Assessment

Postsurvey	Internship Assessment
Interpersonal Skills Extent of Professional Network	Collaboration & Teamwork
Verbal Communication Written Communication Presentation Skills	Communication
Problem Solving Skills	Critical Thinking & Problem Solving
Technology	Information Management
Sense of Career Skills	Initiative & Self Direction
Strong Work Ethic	Professionalism & Ethics
Not Applicable	Creativity & Innovation
Not Applicable	Quantitative Reasoning

To create an aggregate measure of participants' perception of their skill development, scores on separate Likert-scale questions were combined to be analyzed as one. This reflected an overall average of six separate measures that could easily be compared with others. The

researcher reverse coded Likert scale values to the five student response options to norm the values on a scale similar to the internship assessment. The researcher assigned the following values to each rating: strongly agree (5), agree (4), disagree (3), strongly disagree (2), and do not know/does not apply (1). The values were chosen to be as consistent as possible with the values of the Internship Assessment. To combine two or more variables, the researcher averaged the scores together to create a composite variable. For example, if an individual got a score of 5 on "Interpersonal Skills" and a 3 on "Extent of Professional Network," their composite score for the new variable "Collaboration & Teamwork" would be 4.

The researcher repeated the same steps for recoded and combining variables on the internship assessment scores. The "Collaboration and Teamwork" on the postsurvey and "Internship Assessment" does show some relationship of $r_t = .235$, $p = .183$; where one increases so does the other. But this relationship is not statistically significant and cannot be attributed to participation within the NAM Future Ready pilot internship program. There was only one correlation between the postsurvey responses and the "Internship Assessment" was "Information Management," where $r_t = .324$, $p = .079$.

Each of the 55 interns were evaluated using the internship assessment. In the Southwest and Midwest, the survey participants were identified by ICG. The participant information was then deidentified by ICG for the researcher to conduct a desk review. However, ICG had the participants from the Future Ready internship program in Northeast took the postsurvey anonymously which meant they were not able to be deidentified. Because the researcher was not able to receive deidentified data from the postsurvey, the researcher was unable to include the student participants' postsurvey responses from Northeast for testing Kendall tau correlation coefficient. $N = 45$ was the number of student interns who participated in the postsurvey from all

three locations, but because Northeast could not be included in this portion of the research the final numbers was $N = 29$. There were no statistically significant correlations between students' perceptions of their improvement and their supervisors' ratings. With the student participants' responses in the postsurvey being excluded from the researcher's correlational study between postsurvey responses and internship assessment, $N = 29$ could have affected the outcome. The researcher recommends more data be collected in future studies, with a larger sample size to examine whether this positive relationship becomes significant and to examine causality.

The postsurvey results showed a significant difference regarding the work being challenging between the Midwest and Northeast interns, no significant difference between the Midwest and Southwest interns, and no significant difference between the Northeast and Southwest interns. The postsurvey also had students rank how stimulating the work was by internship site, which resulted in no significant differences. The student skill development on the internship assessment and postsurvey was analyzed for correlation and did not result in any statistically significant findings and will need further research with a larger sample size. Regardless of how challenging the project was, how stimulating the work was, the skills learned and enhanced, or opportunities to network in each location, 100% of the participants indicated on the postsurvey that they were satisfied with the Future Ready pilot internship program.

Qualitative analysis. Thirty-two student participants took the presurvey, and 45 took the postsurvey in the Southwest, Midwest, and Northeast. Student intern responses from the open-ended questions in the surveys were analyzed using an inductive thematic approach like the researcher, Mickool used in 2017. This approach centers on the examination and recording of patterns, sometimes called themes, within qualitative data. Themes are defined as patterns within the data that reveal important regularities or occurrences within associated with a specific

research question. Like inductive thematic analysis used in Mickool's study (2017), the researcher read responses aloud multiple times to discern the meaning of the ideas expressed even if the participants' words varied. The initial key concepts were identified then the researcher reread the responses and coded for these concepts. The researcher grouped similar codes which led to emerging themes and subthemes.

All survey data in the current work were collected using QuestionPro, an online survey collection service. Question 17 on the presurvey that ICG administered, as seen in Appendix B, asked, "What are your objectives for participating in the NAM Future Ready internship program? Please list up to four objectives." The researcher took the response output provided by QuestionPro and imported the results to SPSS. The researcher took the response output and divided responses into five subscales stemming from the four items for the qualitative responses on the surveys. The inductive thematic approach revealed that five subscales emerged from the interns' goals indicated on the presurvey, which could range from one to four free responses.

Forty-eight student interns had participated in focus group sessions in the Southwest, Midwest, and Northeast. In addition, 26 employees in the three internship locations had participated in focus group sessions. The researcher employed inductive thematic analysis to identify what the participants' objectives in the program were from the postsurvey and if those objectives were met through the postsurvey and focus groups. Student intern responses from the surveys, focus groups, and employee responses from the focus groups were mapped using an inductive thematic approach when aligning the emerging themes with the research questions. Three key themes emerged through inductive thematic analysis from the open-ended survey responses and focus groups by employing frequency coding to cross reference the findings from initial and axial coding.

The qualitative data provided a rich understanding of the human experience as themes arose and strengthened the results from the quantitative analysis. Obtaining descriptions of the experience through first person accounts (Moustakas, 1994) was a focus for the researcher during qualitative inquiry. As seen in Table 5, three themes were gain work experience and knowledge, use and improve skills, and network with business partners and peers. These themes are further illustrated with student intern quotes who are referred to as Participants A, B, C, and so on based on the order the quote is presented by the researcher in the following paragraphs. The themes are also further illustrated with employee quotes who are referred to as Employees A, B, C and so on in the order the researcher presents the quotes.

Table 5

Themes and Subthemes

Themes	Subthemes
Gaining work experience and knowledge led to increased preparedness for college and future employment	
Learning how to use and apply skills in a work setting led to increase in interns' self-efficacy	• Communication • Teamwork
Incorporating additional personnel in an internship program created meaningful engagement opportunities	• Alignment between project deliverables and supporting personnel increased intern's retention of information. • Building a personal relationship with employers was important to interns. • Engaging with employers in multiple levels of business helped interns envision themselves in the workplace.

Theme 1: Gain work experience and knowledge leads to increased preparedness for college and future employment. The most prevalent theme was gaining work experience and working knowledge. Figure 5 shows most students went into the Future Ready internship

experience with this goal in mind, and the data suggest that an overwhelming amount of 84.85% indicated that that this goal was satisfied. Interns described the importance of showcasing abilities and having a willingness to learn. Participant A, an intern from Midwest, shared that "The key to success is being your best self. Because we're all in high school and when we come here, we're pretty much how they're [the staff at the organization] going to see high schoolers so we must make a good impression. Come here and be ready to learn." Participant B, an intern from the Midwest, noted:

> We were encouraged to think out loud. We are asked okay you think this, but how about this . . . or what if you had this . . . how do you think it would sound. It gives us ideas and pushes our brains further. It helps us build on, try new things, or think about how this would sound or look. It's really helpful.

An employee in the Midwest noted how interns' approach to work was a learning experience for not only the interns, but the company as a whole. Employee A said, "Just like we taught the students around tools and resources, they also brought different ideas to us and a different perspective that we [company] will take into our future which was really good." Willingness to learn and gain working knowledge in a Future Ready internship was a way for interns to prepare for college or employment after high school. Participant C, a Northeast intern, stated, "The Future Ready internship program is an opportunity. It's an opening. It gives us real world skills and experience. So, when we go on further, we already have the internship that we gained those skills." Interns' skill development was consistently acknowledged by employer partners in all three locations. Employee B, in the Northeast, was impressed in the interns' transformation and stated:

> Yeah, it's only been five weeks, but the feedback we gave them in week one, they're doing now. They're learning and applying the knowledge. They're improving. There's been a difference in their presentation from week one to week two. There was a huge difference. There's been a value add.

This was further supported by Employee C in the Northeast: "The benefits of the program overall are presenting, communication, team building. They have made very big improvements. I gave them notes, they turned around and presented to me. I was impressed with fast they can absorb and turn things around." Interns were exposed to diversity in thought and methods used in different industries through the NAM Future Ready pilot internship program and they intended to use the skills learned in their future endeavors.

Figure 5. Intern satisfaction of gaining work experience and knowledge.

Theme 2: Learning how to use and apply skills in a work setting leads to increase in interns' self-efficacy. The second most prevalent theme was interns learning how to use and apply skills in a work setting. The NAM Future Ready pilot internship program had components embedded that challenged students to apply skills learned in the classroom or personal life in a workplace setting. As seen in Figure 6, 66.6% of the participants felt this goal was satisfied

within the NAM Future Ready internship experience. Interns referenced how specific tasks throughout the internship were designed to enhance communication and teamwork skills.

Subtheme: Communication skills. This is illustrated by the following quote from Participant D, an intern from the Midwest, who stated:

> In the real world you're going to have to do it at some point, you're going to have to interview someone you don't know . . . it's weird because people were on their way to meetings or some of them were new and they were on their way to a seminar to talk about the business, so it was nerve wracking. They're in a rush; you're in a rush. It was really stressful, but I learned patience and communication. I've grown more in my communication skills.

Employee D, in the Southwest, wanted interns to learn industry terminology to gain confidence in their communicative abilities. Employee D said, "Talking to youth that don't have as much experience with the terms and concepts we're using and helping explain those makes them think outside the box, which is definitely a professional skill that is helpful." This was further supported by Participant E, a Northeast intern, who said, "I learned how to talk to professionals and how to thank them for being there, and how to make a lasting impression."

Subtheme: Teamwork. Student participants shared that teamwork was a growth area they recognized in themselves and their peers. Participant F, a Southwest intern, indicated, "Working as a team, we learn more by each other and at the same time we learn more about each other's strengths and skills." Another intern had similar insights about teamwork. Participant G, a Northeast intern, stated, "Teamwork. It's more fun and interactive working with a team rather than working by yourself because you must find a common consensus. It's not just your idea. It

needs to be comprised on." Employee E encouraged and witnessed similar behaviors in the interns at the Future Ready program in the Northeast. Employee E stated:

> I've seen improvements in them thinking outside the box, what they can add in their presentations, their public speaking skills, and their relationship building not just with us, but with each other. There's a lot more cohesion between the teams.

These program components resulted in awareness of the interns' skill development by the employer partners and the interns themselves.

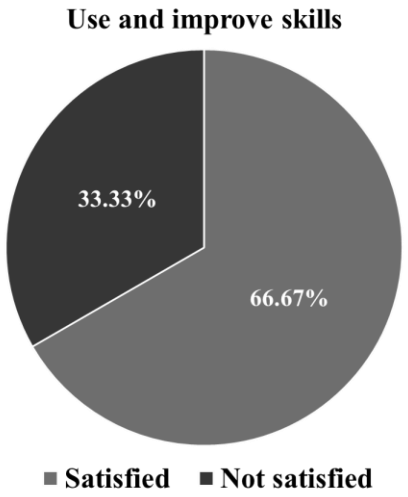

Figure 6. Intern satisfaction with using and improving skills.

Theme 3: Incorporating additional personnel in an internship program creates meaningful engagement opportunities. The third theme was incorporating personnel to create meaningful engagement opportunities. Facilitators, logistics coordinators, mentors, and guest speakers had roles to support students in connecting their classroom experience into practice professionally while also building relationships with the interns personally. As seen in Figure 7, 39.39% of participants felt this objective was met within the NAM Future Ready internship program.

Subtheme: Building a personal relationship with employer partners is important to interns. Participant H, a Midwest intern, noted:

> My mentor provided feedback and some of the time he would set work aside and we'd talk about what I wanted to do in the future. We would talk about personal stuff at the same time as we were talking about the project. It was about what I wanted to do in the future. My mentor asked about me and I felt like my mentor really cared to ask these questions rather than just ask me about work.

Employee F reported similar interactions with the interns in the Northeast program. Employee F stated, "I know it is only a few weeks . . . and even if it's a very small one . . . I feel like I'm making an impact. There's someone here cares about them and here to help them."

Subtheme: Engaging with employers in multiple levels of business help interns envision themselves in the workplace. The employer partners at each of the three locations purposefully involved employees from diverse backgrounds in the internship program. Employee G in Southwest stated:

> We had multiple lines of business and multiple levels. So, we had VPs talking to them all the way to junior associates. A little of that is purposefully because we want students to be able to identify that there is a journey within a career and to be able to identify if we brought in all people who have been around the block a few times versus fresh out of college we want them to see you can fit here too. So, we want those junior associates there that they can identify with and see themselves in.

Participants reported that they learned to appreciate the knowledge that the professionals in the NAM Future Ready program brought to the internship and the organization hosting the internship program. Participant I, also a Midwest intern, expressed, "They're actually there for

us. If you ask something, they'll come to you. If they had the information, they'll give it to you but sometimes they want to work you too, make you think, so they wouldn't tell you at times too."

NAM and the internship providers created meaningful opportunities for the employer partners to contribute to the intern experience and for interns to contribute to the employer partner organization. Of the participants, 61% did not feel satisfied with the level of networking from business partners or with their peers in the Future Ready internship.

Subtheme: Alignment between project deliverables and supporting personnel increased intern's retention of information. Participants from all three locations expressed that having more time with their mentors would have been beneficial to their professional and personal development. Participant K, an intern from Midwest said, "I feel if they [mentors] were there with us through the whole phase of the process it probably would've been easier." Mentor involvement was also brought up by employees at each of the three locations. Employee H in the Southwest stated:

> Some lessons learned was around mentors. We had planned for 1 mentor per group, luckily, we ended up with a couple extra mentors, but I think there's an opportunity to increase that. So, I think looking back that was one area we felt like we could've done differently, and the students might've had a more engaging opportunity.

In addition to mentor involvement, the timing of guest speakers or mentors should coincide with the sequence of activities for increased retention of information in interns. Participant L, a Southwest intern, stated:

> I think the speakers are helpful, but sometimes we get a speaker for a certain part of the project but we're not there yet. So, it's bad timing because all the good information

they're giving us we're not able to remember it later down the road when we need it. So, they could be planned out, put in at better times if that makes sense.

An employee in the Southwest referenced how the intention was to align the guest speakers and the interns' deliverables, but it may need to be altered in future replication based on intern feedback. Employee I said:

> There's probably an opportunity to align those more closely, what are the expectations of the volunteers, what are the expectations or needs . . . it'll be interesting from the students, getting that student feedback to say if we provided enough guidance from the employer standpoint. We said we want you [interns] to build a project plan so we brought in an expert to teach them about project planning and then we said we want you to build and event, so we brought in event planners to talk about events.

An employee from the Midwest had similar reflections as the Southwest employee. Employee J, from the Midwest noted:

> One thing we thought we would do differently from an internal perspective is we would bring in one mentor into our planning sessions, leading up to the internship program and then that individual would be the lead mentor. We would use them as an advocate to engage the other mentors and keep the other mentors up to speed on things and what have you. We would also shift things slightly from a guest speaker perspective. We would have guest speakers that were focused specifically on helping to inform the project. We weren't too far off from that this time around. We probably just had a few extra speakers that we wouldn't necessarily need next time.

Across all three locations, the employer partners involved in the program were recognized by student interns for their efforts in providing an internship. Certain roles and specific people were

identified as being most helpful, while other roles and sequence of events were identified as areas of improvement from the participants' perspective.

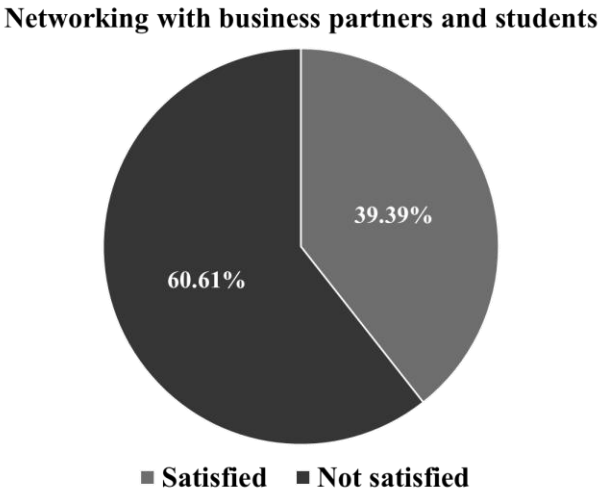

Figure 7. Intern satisfaction of networking with business partners and students.

Chapter 4 Summary

The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The first intention of the study was to explore how interns perceive and describe their experience and what interns identified as important elements within the NAM Future Ready pilot internship program. A secondary intention of this retrospective study was to explore the perceptions of employer partners who hosted a NAM Future Ready pilot internship program. The quantitative analysis of the presurvey, postsurvey, and internship assessment shows how student interns perceived the work performed and the skills developed during the internship. The qualitative analysis of the presurvey, postsurvey, and focus groups provides rich descriptions of the actual experiences of the interns. The interns

provided insight into the enrichment of their experiences that benefitted them as well as the program components that were critical to the quality of the internship.

The quantitative analysis of the postsurvey indicated there was statistical significance between how student interns from one Future Ready pilot site and another Future Ready pilot site perceived the challenging nature of the work performed. There was no statistical significance between how student interns from one Future Ready pilot site and another Future Ready pilot site viewed the stimulating nature of the work. The correlational study did not show any statistical significance between the student interns' perceptions of their individual skill development on the postsurvey and the employer partners' perceptions of the student interns' skill development on the internship assessment. However, the thematic analysis conducted on the open-ended question on the postsurvey showed student interns had used and improved skills during the internship. Additionally, the open-ended question revealed student interns gained work experience and working knowledge as the most prevalent theme. Overall, all student interns from each of the three Future Ready pilot sites were very satisfied or satisfied with the program.

Chapter 5 will present the conclusion of this programmatic evaluation and cover the implications for stakeholders, such as employer partners and student interns, who are involved in a NAM Future Ready pilot internship program. The relationship between the internship program and closing the skills gap in the United States will also be discussed. The researcher will provide recommendations for action and recommendations for further study. Lastly, the researcher will present a connection between a Future Ready pilot internship program and the United States being competitive in a global marketplace, when planned as a workforce development strategy.

Chapter 5: Discussion and Conclusion

This chapter provides a discussion of the mixed methods program evaluation findings of the NAM Future Ready pilot internship program. The researcher carefully managed the evaluation process by drawing on both quantitative and qualitative data to systematically integrate multiple evaluation methods. This chapter also addresses the implications for practice, policy, and theory. The chapter concludes with recommendations for further research for employers, educators, nonprofits, students, and other stakeholders involved with internship programs.

Prior to this study, few researchers examined high school internship programs as a workforce development strategy within in United States. The lack of skilled workers in the United States has led to the American labor market attracting and offering more money to talented foreigners (Porter, 2013). Talented foreigners are continuously hired in the U.S., as confirmed by Freifeld (2014), who found a discrepancy between skills being taught in the U.S. and the labor pressure in the market resulting in the U.S. looking internationally for high-talented individuals. This proves the workforce skills of other countries will overtake those of the United States unless there is a change in how skills are taught or acquired by the future workforce (Porter, 2013). The job skills gap is a major reason why there are still high levels of part-time workers and underemployment in the United States (Porter, 2016). The abilities most commonly valued among employers include communication and interpersonal skills, creativity, problem solving skills, and critical thinking abilities (Bureau of Labor Statistics, 2015; Freifeld, 2014; Keller, 2012; Lin, 2015; McCale, 2008). Previous research has shown that essential skills are invaluable in the workforce, adding credibility to why essential skills should be considered an integral part of preparing students to be competent and competitive in the world of work. For

students to be successful in their future careers, it is critical that essential skills be fully integrated and embedded into high school education.

The Future Ready pilot internship program was the beginning of a research opportunity to study how and if this form of internship program can help close the skills gap within the nation. The purpose of this mixed methods program evaluation was to identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, if participants identified skills developed through the internship program, and if the skills developed align with the skills employers need closing a skills gap in the United States. The program evaluation was conducted to analyze how student interns perceived their experience in a Future Ready internship. In addition, the program evaluation was conducted to determine if the skills developed by the student participants in a Future Ready internship coincided with the knowledge, skills, and abilities companies seek in employees. The preexisting data used in this study was collected by NAM and ICG during the NAM Future Ready pilot internship program. Further, for this study, the quantitative and qualitative data were analyzed concurrently, as the researcher used a concurrent mixed-method approach with triangulation. The approach involved using three or more methods to confirm, cross-validate, or corroborate findings.

Summary of Results

The program evaluation provided findings toward answering the following research questions:

RQ_1: How do Future Ready interns perceive and describe their experience in the pilot internship program?

RQ_2: What do Future Ready interns identify as important elements in the pilot program?

RQ_3: How do the employer partner staff perceive and describe their experience in the Future Ready pilot internship program?

There is, there has been, and there will continue to be an increase in global competition and changing nature of jobs making essential skills a necessity (Bureau of Labor Statistics, 2015; Gault et al., 2010; Uhalde, Strohl & Simkins, 2006; Wilhelm et al., 2002). In a 2006 global economic study, Uhalde et al. found that policy makers and economists strongly agreed that a highly educated and skilled workforce is one of the indispensable keys to economic success in the United States. Research continues to show high school is a critical time for these skills to be developed (Freifeld, 2014; "Investing in People," 1989; Keller, 2012; Lin, 2015; Uhalde et al., 2006; Wilhelm et al., 2002). Internships provide students with the opportunity to make a connection between their academic studies and the workforce. The nature of jobs and skills is changing quickly, and the U.S educational system is not keeping with the demands (Freifeld, 2014). Each experience a person has will influence that person's future. If students are taught and apply essential skills during their high school education, it will influence how students continue to apply those skills and further develop those skills. Dewey's (1938) theory of continuity of experience served as a foundation for this programmatic evaluation. The notion that every past experience influences the actions and perceptions of current experiences and influence future experiences was integral in this mixed methods study.

The researcher conducted a desk review of the NAM Future Ready pilot internship program. The preexisting data was collected by ICG International, Inc., meaning that the data collection happened simultaneously with neither the quantitative nor the qualitative data

influencing the other. While conducting the desk review, the researcher used interpretations from both the quantitative and qualitative data to provide additional information and results. The researcher analyzed how three pilot sites implemented the internship and the variables associated in each location. The results include participants' perceptions of the program, important elements for interns to apply and learn essential skills, and recommendations for continued replication. The results of this study may provide students, educational leaders, business community, parents, and state and local governments with insights into how elements of a NAM Future Ready internship program can be beneficial to enhancing essential skill development in an experiential learning setting and implemented as a workforce development strategy.

Discussion of Results

Three research questions guided this study. The first research question was:

RQ1: How do Future Ready interns perceive and describe their experience in the pilot internship program? The purpose of this research question was to determine if participants identified skills developed through the internship program and how interns perceived the work they performed during the internship experience. The interns either worked on case studies or a project of value for the employer, depending on the internship site. The interns ranked their perceptions of the work being challenging or interesting, which the researcher compared across the three internship locations. The results were statistically significant regarding the work being challenging and were not statistically significant regarding how interesting the work was between the sites. The nature of work that interns performed impacted the participants' perceptions of the experience.

Student participant responses regarding their perceptions of whether their work was challenging differed at each internship site. The first research question of this study asked, "How

do Future Ready interns perceive and describe their experience in the pilot internship program?" Responses to postsurvey question 3.1 indicated that there was a significant difference between the Midwest and Northeast interns, (U = 41.50, p = .02), no significant difference between the Midwest and Southwest (U = 63.00, p = .08) interns, and no significant difference was present between the Northeast and Southwest interns (U = 106.00, p = .29).

Research has shown that working with real clients as opposed to mock case studies aids students in learning problem-solving skills and managing the ambiguity a young professional will experience when they begin working (McCale, 2008). In comparison, the Southwest interns were assigned one project of value to the employer where they planned a stand-alone event that would be implemented by the company after the internship concluded. The Midwest interns had two projects; in the first project, the interns were given the task of describing the company; in the second project interns developed strategies aimed at increasing the member usage of the company's wellness program. This was in contrast to the Northeast interns who were instead assigned three case studies focused on hypothetical problems for different industries.

The resulting data suggested that the type of work performed by the interns directly impacted the participants' perceptions of the experience and whether they found the work challenging. The finding is significant as it further underscores the importance of providing interns with challenging work of value to better prepare future employees with knowledge and understanding of the workforce. Completing a project of value or case studies during an internship were more impactful if student participants deemed the work stimulating. The importance of this finding further demonstrates that when students are given the opportunity analyze problems, provide solutions, and apply their knowledge, they become more interested and invested in their assigned work.

Each of the projects in the Southwest, Midwest, and Northeast were interesting to the interns regardless of whether it was a case study or project of value to the employer partner. Responses to Question 3.2 of the postsurvey indicated that no significant differences among interns' ratings were present among the three internship sites ($\chi^2 = 0.32$, $p = .85$). In internships, students should be encouraged to generate their own analyses of the problems under consideration, develop their own solutions, and practically apply their knowledge of theory to these problems (Wilhelm et al., 2002) regardless of if the work performed was a project of value or a case study. Wilhelm et al. (2002) found students exhibited greater interest in and learning when they were required to organize facts around major concepts and actively constructed their own understanding of the concepts in a rich variety of contexts.

The results indicated that interns perceived the work to be more challenging when completing a project of value for an employer than completing case studies. The results also indicated that all internship providers selected projects or case studies that were interesting to the interns. The NAM Future Ready internship programs provided students with opportunity investigate problems, offer solutions, and apply their knowledge from the classroom in an experiential learning environment. Based on the findings of this study, the work should be challenging and stimulating for the interns while providing value to the employer partner's organization or community.

RQ2: What do Future Ready interns identify as important elements in the pilot program? The purpose of this research question was to determine if the skills desired by employers could be taught through a work-based learning experience such as an internship, which aspects of the program implementation went well, which areas could use improvement, and to collect data from the student intern participants regarding their overall perceptions of the

program. Three themes emerged as important elements within the program: gaining work experience, learning how to use and apply skills, and creating meaning engagement opportunities with personnel. The participants provided details about how these elements were integrated into the program differently at each site. Those elements impacted student perceptions of the program and provided considerations for employer partners, NAM, and other stakeholders to consider when replicating an internship program such as a NAM Future Ready program.

Theme 1: Gain work experience and knowledge leads to increased preparedness for college and future employment. Students indicated they participated in the Future Ready pilot internship program to gain experience and knowledge that they could then apply to their academic or professional pursuits. The second research question of this study asked, "What do Future Ready interns identify as important elements in the pilot program?" The most prevalent theme, by inductive thematic analysis of the presurvey, postsurvey, and focus groups, was to gain work experience and knowledge. Students indicated they wanted to learn real-life work experience and apply their classroom knowledge in the internship program. Other participants expressed they built new relationships and developed a bond, not only with the employer partners, but with their peers as well. Participant N, a Northeast intern, stated, "Even if it's 2–3 weeks you already feel you know those people and really worked with them and done something together." Working on projects of value for each employer or case studies provided each student with an opportunity to apply the essential skills they had acquired academically in a real-life employer setting which further prepared them for the world of work following high school.

Theme 2: Learning how to use and apply skills in a work setting leads to increase in interns' self-efficacy. Using and developing skills was another Future Ready pilot internship program internship objective that interns identified. The second research question of this study

asked, “What do Future Ready interns identify as important elements in the pilot program?” The researcher employed inductive thematic analysis on the presurvey, postsurvey, and focus group and found the second most prevalent theme was interns using and enhancing their skill sets. Students must possess a multitude of increasingly sophisticated skills to be valuable contributors to the workforce. In addition, employers want meaningful evidence that students both possess these skills and can use them on the job (Wilhelm et al., 2002). However, in the correlational study, the relationship between interns’ perceptions of skill development on the postsurvey and supervisor’s perception of interns’ skill development on the internship assessment was not statistically significant and cannot be attributed to the intervention of a Future Ready pilot internship program.

A flaw in the preexisting research was that student participants in the NAM Future Ready program in Northeast took the postsurveys anonymously which meant they were not able to be deidentified by ICG. Therefore, the Northeast student participants’ responses in the postsurvey could not be included in the researcher’s correlational study between postsurvey responses and internship assessment. Had ICG required those interns to identify themselves like the other two locations, all intern participants’ responses on the postsurvey and internship assessments could have been used in the correlational study. The most common flaw in a data set occurs when there is missing data. For the collected information to be useful, it is imperative that surveys are filled out completely and that information supplied is correct.

In addition, the researcher had to norm the scales of the internship assessment and postsurvey. Supervisors evaluated students’ skill development in eight categories. However, the postsurvey ICG created had student participants self-assess their skill development in nine different categories. The skill development categories were not the same as the internship

assessment and neither were the Likert scale values. Ideally, the categories and Likert scale values on the internship assessment and postsurvey would have been the same on both. The researcher was able to combine the skill areas where there were similarities and was able to reverse code the Likert-scale values. Had the categories and Likert scale values been the same it would have alleviated the researcher from performing additional analysis. The use of the same Likert scale values on all instruments would have prevented the researcher from having to do reverse coding during the quantitative analysis.

There were no statistically significant correlations between students' perceptions of their improvement and their supervisors' ratings. With the student participants' responses in the postsurvey being excluded from the researcher's correlational study between postsurvey responses and internship assessment, N=29 could have affected the outcome. The researcher recommends more data be collected in future studies and with a larger sample size to examine whether this positive relationship becomes significant and to examine causality. Pascarella (2006) noted that one of the problems with education impact research is that there is frequently an absence of information about why an intervention or program has the effect that it does. However, in each of the Future Ready pilot internship programs, student interns successfully met the desired objectives set by each employer for their assigned work projects. The deliverables created for the program increased student self-efficacy and allowed interns to demonstrate their existing skills and development of those skills throughout the Future Ready internship program.

Theme 3: Incorporating additional personnel in an internship program creates meaningful engagement opportunities. Collaboration between interns and each other and collaboration between interns and the employers encouraged discussion of ideas and diversity of thought. The researcher found a third theme through inductive thematic analysis, which was the

ability for interns to network with employer partners and peers. 39.39% of participants felt this objective was met when describing their internship experience. Interns' perceptions of their ability to network was influenced by the relationship they built with the internship staff and their peers. Interns and mentors shared that when conversations were focused not only on the project, but also on their personal lives, it led to a stronger connection between them. Student interns gave differing reasons for what led to their satisfaction, such as feeling valued by the employer partner and having opportunities to build relationships with employees of the company. Participant M, a Southwest intern, said, "For me it's nice to know [Company A] is a big company and they have interacted with us and listened to what we have to say and taken into consideration what we're doing in planning an event with their sponsoring." Interns also shared how knowledgeable the internship staff was about the project and organization also impacted their satisfaction level with networking. Participant J, an intern from the Midwest, indicated the mentors were not knowledgeable about the company and could not provide support, stating, "We talk to our mentors about oh we're learning this and this and they're like oh really. What's this, we never heard of that before?!? Oh, they get these benefits, we don't even get these benefits."

Interns noted that not all guest speakers were sequenced to support the interns' daily deliverables and could have been more strategically aligned with the culminating project. Results of this study implied that purposeful collaborative opportunities, coupled with professionals sharing expertise, contribute to interns' perceptions of successful networking experiences. Students were put into real situations or simulated situations to demonstrate their existing skills and development of those skills throughout the Future Ready internship. The internship provided an opportunity for students to receive a comprehensive viewpoint from professionals as interns completed a project of value or case study. A comprehensive educational program, like an

internship, that promotes growth and development provides an important opportunity to become competitive in the United States economy while enhancing the quality of interns' lives (Wilhelm et al., 2002). The inclusion of activities imbedded in the program to support interns in completing their culminating projects resulted in 84.85% satisfaction of the student participants. 66.6% percent of interns expressed the internship provided them the opportunity to showcase their skill development through the program. Thus, this finding is significant in that the comprehensive sequence of activities led by professionals provided greater opportunity for interns to gain work experience and knowledge.

Lastly, the interns should feel supported and provided with opportunities to network with peers and employees throughout the internship. The differences in how each of the partners supported interns at each site during the implementation of the NAM Future Ready pilot programs, which impacted students' perceptions of the internship. Interns cited how relationships built with staff, mentors, and peers influenced the cohesiveness of the team and their feelings of work satisfaction while participating in the Future Ready internship program. Based on the findings of this study, any engagement opportunity between partner and interns should be intentional for the engagement to be meaningful.

RQ3: How do the employer partner staff perceive and describe their experience in the Future Ready pilot internship program? The purpose of this research question was to determine what the employer partners identified as objectives for hosting the NAM Future Ready pilot internship program, identify the skills employers seek in current and future employees, if these skills could be taught through a work-based learning experience such as an internship, and if the skills developed align with the skills employers need closing a skills gap in the United States. Providing a real or simulated work experience, where intentional educational activities

are imbedded to develop skills in a future talent pipeline, was a fundamental goal of each employer partner who hosted the NAM Future Ready pilot internship program. How the experience was implemented to promote skill development and working knowledge varied by each of the NAM Future Ready pilot internship program locations. Regardless of the differences in program execution, all the employer partners stated their objectives were met through this experience.

Regardless of whether interns were working on a project of value to the employer or on case studies, the project deliverables at each of the three pilot sites were designed for interns to demonstrate their skills and competencies. A Southwest employee described how the skill-building within the NAM Future Ready program supported the company's mission by stating:

> A huge part of that [initiative] is education of workforce skills and workforce development and NAM brought both of those aspects together. The internship program was going very deep into helping students be prepared for their careers by providing exposure and opportunities, so it aligned very well to our overall employer strategy.

Not only did the Future Ready pilot internship program align with company-wide skill-building initiatives, it also provided personnel involved to observe how high school students approach and complete projects. Hurst and Good (2010) found that employers who provided internship experiences enhanced the organizational commitment of current and new employees and created a pipeline to more mature, potential employees. An employee in the Midwest expressed how valuable it was to witness how interns applied their existing or new skills in this experience. Employee K noted:

> I know I learned personally a lot of different things through this process like how they [interns] learned about the company but also about their own personal development,

> critical thinking skills, begin more innovative, more consume center, all of that. So, I would say our expectations were met and then some.

A return on investment for employer partners who hosted a NAM Future Ready pilot internship program was the opportunity to build a talent pipeline in their organization. Employee L in Midwest learned how to better market and expose students to their company because of the NAM Future Ready internship program. Employee L stated:

> A goal was to look deeper into the talent strategy pipeline, really getting our name out there into different demographic. I would add too, how we look to the future in being innovative with the next generation, specifically the Z generation, to better understand them. And how we're going to not only market within that demographic but also from a recruiting perspective begin to understand what they need and what does that future hold. So, I think that was really important as well and aligns with our values, right, integrity, compassion, relationships, innovation and performance.

Employers want a future talent pipeline with essential skills, so the business can be more competitive within their industry. Like the Midwest employee, a Southwest employee also stated building a talent pipeline was a long-term workforce development strategy for their company. In addition, the Southwest employee shared how the company also wanted to build ambassadors in the community:

> We have so many fields that we need great talent and if we can build that talent earlier and if we can build that talent that is looking to come back to us that would be a huge win for us. It’s not getting less competitive out there from our perspective of hiring and there are fields that have huge deficits. There are fields going unfilled right now so if we can expose students to those and start to build that pipeline that’s a huge long-term win for

> us. A softer long-term win is building ambassadors out in the community. We want people to think of [Company A] as doing good in the community, as a place you want to do business, and as a place you're proud to have in your community.

Each of the employer partners had desired outcomes when hosting a NAM Future Ready pilot internship program. Even though none of the employer partner companies were in the same industry, they all identified the similar desired outcomes. The desired outcomes were to provide an experience for interns to learn or enhance essential skills, build a future talent pipeline, and/or create ambassadors in the community. How each of the partners reached the desired outcomes varied by site. Regardless of the variations during implementation, all employer partners felt their objectives were met and outcomes were accomplished.

Discussion of the Results in Relation to the Literature

Understanding the relationship between an intern's perception of an internship and how an internship affects skill development can guide educators, businesses, and other stakeholders on change how essential skills are effectively employed in work-based learning and could result in a more talented and skilled future workforce. This program evaluation provided a detailed description of the implementation of a 2017 NAM Future Ready pilot internship program, including key activities and challenges encountered, and key outcomes of the program. The researcher explored the factors that influence student interns' and employer partner participants' perceptions of and satisfaction throughout the pilot program. There is existing literature on the value of connecting classrooms to careers through work-based learning. However, there is extremely limited literature about which specific elements of work-based learning interventions affect student skills development or self-efficacy. In addition, no literature exists on high school internship programs as a workforce development strategy. The research examined all these

components comprehensively in this program evaluation on a NAM Future Ready pilot internship program, making it the first contribution of its kind.

Essential skills necessary for the workforce are developed through various types of learning experiences. Lin et al. (2015) referenced multiple sources and claimed fostering interaction among experts, peers, learning objects, and activities in formal, informal, and serendipitous ways, a networked learning environment embedded with community of practice can help learners attain constructive knowledge, instead of cognitive knowledge alone. Interns were able to quantitatively assess their own skill development on the postsurvey and qualitatively share about their skill development in the focus groups. Students ability to recognize their personal growth is in alignment with Dewey's (1938) theory of experience. When experiential learning includes accounting for students' past experiences, such as classroom knowledge, and provides new experiences for students to apply their past experiences then students can assess their growth and contribute value to the workforce.

Existing literature supports the value of connecting classroom to career through work-based learning. "The value of an internship will be maximized if educators can provide the appropriate structure and integrate the experience with the academic background of the student" (Hergert, 2009, p. 12). Educators are expected to find ways to integrate essential skills and work-based learning into the course curriculum. Yet, not all educators are knowledgeable about the essential skills desired by employers. Subject success and graduation rates set the standard for education leaving educators to struggle with how to prepare all students for careers (Berkowicz & Myers, 2017). Additional literature recommended multiple partners educate students on how to connect classroom to career effectively in internships. When intentionally framed and developed as learning activities, internships will typically involve a three-way partnership

between student, employer, and educator (Inkster & Ross, 1995; Keller, 2012). This program evaluation further validated the importance of education being a collaborative approach.

The researcher could not find existing literature on internships as a workforce development strategy. The U.S. labor market is being transformed by global competition particularly affecting the types of jobs available and skills needed to perform those jobs ("Learning Partnerships," 2004). The importance of business relevance in education coupled with an incredibly challenging job market magnifies the importance of students being better prepared for the marketplace (McCale, 2008). This means it is urgent to strategize solutions for the economic future. Again, the researcher could not find any existing literature on which specific elements of work-based learning interventions impact or correlate with student skills development or self-efficacy. Research on essential program elements can provide a basis for best practices from individual programming sites, vital programming components and strategies for increasing attainment of benchmarks, and successful outcomes from the perspectives of program site alumni (Bamberger et al., 2006). The identified gap in literature between essential skills development through work-based learning like internships served as a foundation for this program evaluation.

The desk review of preexisting data focused on interns and employer partners' perception of the NAM Future Ready pilot internship program and the elements that impacted their satisfaction. The student intern participants at the three pilot internship sites were surveyed at the beginning and end of the internship. ICG, who conducted the preexisting research, led a student focus group and employer partner focus group at each site during the internship. At the end of the internship, supervisors evaluate student interns' skill development in eight categories through an internship assessment. The internship assessment was a NAM requirement for students to earn

certification in their NAM-affiliated career pathway programs that the researcher compared in a correlational study with specific questions on the postsurvey. Data related to the research participants' perceptions about elements of the program or the program overall were examined for this study. The researcher deidentified participants in the preexisting data prior to the program evaluation for confidentiality. The researcher used multiple validity measures and disclosed any bias prior to analysis of the NAM Future Ready pilot internship program.

The quantitative data showed how interns perceived the challenging and stimulating nature of the work performed, identified skill development of the interns, and explored intern satisfaction levels with the pilot program. The qualitative data provided rich narratives and participant testimonials that supported the quantitative findings and increased the reliability of the quantitative data. The data from this program evaluation linked theories and previous literature with work-based learning, skill development, and workforce development that will help schools, organizations, businesses, and other stakeholders on how to structure intentional student learning outcomes.

Limitations

The researcher recognizes that there are certain limitations inherent in conducting this research study. The limitations include that the program evaluation is limited to the data collected by NAM and ICG, a research consult hired by NAM. The study was delimited to three cities across the United States where corporations sponsored the pilot program and high school students who are legally able to work in the United States. The sample consisted of NAM and non-NAM students, who may or may not have participated in work-based learning activities prior to the NAM Future Ready internship program. Lastly, ICG did not use consistent research methods with the sample population, which led to gaps in the researcher's program evaluation.

The researcher reviewed the archival data collected in the Future Ready internship program followed by a series of descriptive and comparative analyses of the preexisting data. Prior to the researcher conducting a desk review, ICG and NAM had already collected data on the Future Ready program. The researcher was provided access to these archival data and reviewed the research data that had been collected by ICG from students who had participated in the program. The researcher was limited to the type of data collected by ICG and how the data were tracked and analyzed by ICG. There were inconsistencies in how the data were collected at each site and how the data were tracked. The researcher had to norm the scale of the postsurvey for more consistency with the internship assessment by reverse coding each survey response on a 5-point Likert scale, clarify any inconsistencies with ICG, and conduct further analyses for reliability and validity with the preexisting data.

The findings of this study were limited to how ICG conducted a purposeful convenience sampling method among the participants, which naturally can have influence over the reliability and validity of the research and the scope of the analysis. All students eligible to apply for the NAM Future Ready pilot internship program were supposed to be selected from NAM-affiliated career pathways who had received support in work-based learning activities and internship preparation. Of the three locations, the Northeast site had NAM and non-NAM student interns. An important distinction to consider is that the non-NAM interns may not have had access to the same opportunities and resources in school that their NAM counterparts had. Those students that had access to NAM resources may have had an advantage over the non-NAM student interns in developing essential skills prior to the participating in the Future Ready program. Without any previous exposure to work-based learning experiences, the non-NAM participants' perceptions

of the Future Ready pilot internship program could be inconsistent with the NAM participants' views.

While 56 interns participated in the Future Ready internship pilot program, not all 56 of the interns participated in the research. Of the 56 interns, 32 took the presurvey, while 45 took the postsurvey, 48 participated in a focus group, and 56 were evaluated with an internship assessment. Kalikow-Pluck (2011) found data to be limited when respondents had to self-report information and may not be representative of the entire population. Not all student interns identified themselves when participating in the research conducted by ICG. In the Southwest and Midwest, ICG had the student interns identify themselves in the presurvey, postsurvey, and focus group. In the Northeast, ICG had student interns identify themselves in the presurvey and focus group, but not on the postsurvey. The student interns' names were inputted by the supervisor on the internship assessment, which allowed ICG to identify each student. Since the Northeast interns completely the postsurvey anonymously, their skill development ratings could not compare with their supervisor ratings on the internship assessment. Had that intern information been obtained by ICG, the researcher would have had a larger sample for the correlational study and may have provided more significance with a larger cohort of interns. Considering these limitations, the purpose if this research study is not prescriptive, but rather descriptive.

Having consistency in the research instruments would have allowed the researcher to have a streamlined and automated research process. This limitation was not only recognized by the researcher, but by ICG (2017), who recommended a process with corresponding tools and systems to monitor the equality of the Future Ready internship program and assess its outcomes. "Using a common framework for evaluation has the potential to provide insight to current

processes and identify areas for improvement within each setting" (Mickool, 2017, p. 67). A consistent and streamlined approach ensures the reliability and validity of any research study.

Implication of the Results for Practice, Policy, and Theory

Experiential learning, when structured as an educational practice, like that of an internship or other form of work-based learning, is ingrained within constructivist theory. Dewey (1938) referenced how authentic knowledge and education comes through experience. As Von Glaserfel (1996) and Fosnot (1996) found, constructivism or constructivist theory postulates students learn by actively constructing their own knowledge. Knowledge under constructivism is not seen as a commodity to be transferred from expert to learner, but rather as a construct to be pieced together through an active process of involvement and interaction with the environment (Schcolnik, 2006). The evidence from this program evaluation links theories with experiential learning that could help schools, organizations, businesses, or other stakeholders to structure intentional student learning and skill-building outcomes in traditional and nontraditional educational settings.

Implication 1: Work-based learning considerations. Learning how to use and apply skills in a work setting leads to increases in interns' self-efficacy. Participants in this study described the need for an appropriate mix of challenges and support for connecting the classroom to a career. As with constructivism theory, the research confirmed students would have a better understanding of how concepts, theories, and/or skills learned in school can be applied in the workforce, therefore becoming more prepared for a career. These findings further validate the theory of experience (Dewey, 1938) as well, where people's past and current experiences influence their experiences in the future. The research confirmed interns approached the internship with an open-mind with the intent of applying and learning new skills. Participant M,

an intern in the Southwest, stated, “My teacher said here’s a good opportunity that you should take advantage of so that you can build your resume. I was like okay, I’ll take it.” Overall, the classroom to career connections during the NAM Future Ready internship programs meant that students had fundamental knowledge of how to connect classroom learning to the workplace setting.

Dewey (1938) claimed educators are responsible for including immediately valuable experiences. However, the study presented a gap in how essential skills can be developed in other forms of experiential learning activities. Not all educators or employers are knowledgeable or experienced on how to effectively teach essential skills in work-based learning experiences or internships. “Educators are held accountable for students’ achievements and struggle to find ways to teach them the knowledge and skills necessary to success in the workplace” (Wilhelm et al., 2002, p. 34). Organizations with experience in work-based learning can guide novices who are not experienced in work-based learning enter the zone of proximal development (Vygotsky, 1978). The challenge is to align student learning outcomes such as essential skills in the classroom and in experiential learning opportunities. To best prepare students for the workforce, educators should ensure work-based learning opportunities are embedded in all educational programs.

Work-based learning experiences occur when employer partners, community partners, educators, and other stakeholders collaborate to provide comprehensive educational opportunities for students. The NAM Future Ready internship program is a form of work-based learning. Educators and partners can develop student learning outcomes focused on essential skills. Businesses can make contributions to schools by providing information needed in developing course content and instructional methods that meet the current and emerging needs of

the workplace ("Investing in People," 1989; McCale, 2008; McHugh, 2017; Moran, 2013). The emerging needs for essential skills in the workplace can be woven into curricula with employers supporting work-based learning activities that lead to students developing and enhancing their skill sets in preparation for an internship or workforce.

Researchers ("Investing in People," 1989; McCale, 2008; McHugh, 2017; Moran, 2013) have supported the notion that the most important contribution the business community can make is to help students understand the world of work and how it is related to what students learn in school. Nothing can make the relationship between the nexus of school and work clearer than assurance from the business community that what they are learning in school will be applicable and beneficial in the workforce. McCale (2008) and McHugh (2017) found that employers included in the classroom education can assist faculty in providing relevance between work and school, provide students an opportunity to demonstrate skill sets, and lead to employers receiving better prepared employees.

Implication 2: Skill development considerations. A critical time for essential skills development is the high school years, when students are rapidly maturing toward adulthood, learning the key skills that prepare them for college and careers, and if given the opportunity, develop a much deeper understanding of the community and world around them ("Youth employment matters," 2014). The researcher anticipated the employer partner and student participants from a pilot location would identify development of the same essential skills resulting in a correlation between the essential skills student participants gained or enhanced during the pilot internship program and what skills employers desire in their workforce. This was disproved by the correlation study between the skill categories on the postsurvey and internship assessment as it did not show any significant findings. While there was a type of relationship

between “collaboration and teamwork” on the postsurvey and the internship assessment, the relationship was not significant and could not be attributed to the NAM Future Ready internship program as an intervention. The relationship between how employers and students identify essential skills may become significant with a larger sample size or different types of work-based learning interventions. The implications of this study are that having both the employer partners and students assess essential skills development of the students serves as an opportunity for students to be reflective about their development and encourages discussion between different stakeholders.

As students prepare for the workforce, they should assess their essential and technical skills and seek opportunities to learn or enhance their skills by consulting with teachers, school counselors, and business and community partners for guidance. Sampson, Reardon, Peterson, and Lenz (2004) described career readiness as a combination of an individual’s capabilities to make appropriate career choices along with external factors that influence professional development. This suggests that interns’ ability to effectively perform in a work setting is based upon a specific level of readiness. It is imperative for students to be introspective about their individual capabilities and areas for growth that they want to work on leading into an internship or a career.

Implication 3: Internship provider considerations. Learning and development occur when a program or experience includes authentic activities, reflection, and opportunities to share ideas and values (Vygotsky, 1978). Building consensus around the goals and vision of an experiential learning program like an internship program, encourages stakeholders to determine how their roles support the goals and vision. It is important for roles to be identified among each stakeholder group when planning an internship program and holding accountability aligned to

those assigned roles. Sides and Mrvica (2007) noted that students are more likely to become lifelong learners and provide meaningful contributions to an organization during an internship and as future employees if they understand the expectations of each stakeholder involved in providing the experiential learning opportunity. In the program evaluation, the value of the employer role, the extent to how employers supported students, structured engagements, and provided mentorship was evident. The study added new knowledge as the researcher predicted: It was documented that students provided recommendations on how the role and commitment of employer partners could be improved in the NAM Future Ready internship program in subsequent years. This finding has the potential to inform practice.

Incorporating additional personnel into an internship program creates meaningful engagement opportunities. How this theme was embedded in the NAM Future Ready program has implications for the continuation of the Future Ready internship program. In the focus groups, both interns and employer partners stated that alignment between project deliverables and supporting personnel increased interns' retention of information, implying that partners should be involved when interns complete project deliverables. It was also found that building relationships with employers was important to interns, implying that interns desire guidance related to their career goals and desire to have a personal connection with employers as well. Lastly, it was found that engaging with employers in multiple levels of business helped interns envision themselves in the workplace, which implies students were considering their future career paths within the company hosting the internship. The internship program was an experiential learning environment where multiple stakeholders had a role in the planning and implementation. The employer partners and interns collaborated in a work setting. Wilhelm et al. (2002) found the best method for learning essential skills is to practice with an expert coach or

mentor under realistic working conditions until the student has achieved fluency. Similarly, the employer partner personnel in the NAM Future Ready pilot internship program, provided personal and professional learning opportunities for interns. Throughout the internship process, students built their skills and knowledge through activities, workshops, or interaction with mentors and industry professionals. The findings of this study suggest that employers have an essential role in identifying meaningful ways for student interns to contribute to the organization, developing the structure and sequence of activities in an internship program and creating opportunities for student interns to network with a variety of professionals within the organization.

In addition, commitment from an employer to make sure everyone involved from the organization is clear on the expectations and type of involvement needed is critical to the program. The results from student intern responses imply what elements of the program had the most impact on learning and development within an internship. Specifically, how the alignment between project deliverables and supporting personnel increased intern's retention of information, building a personal relationship with employers was important to the interns, and engaging with employers in multiple levels of business helped interns envision themselves in the workplace.

Implication 4: Workforce readiness considerations. Regardless of the differing perceptions of the value of internships, both students and employer partners, are motivated by a return on investment. Learning how to use and apply skills in a work setting led to increase in interns' self-efficacy. Self-efficacy gained through internships can lead to students being more persistent in their educational pursuits (Gainor, 2006). This study confirmed that when interns were exposed to a realistic work setting, it resulted in interns identifying what essential skills

they applied and developed. This program evaluation implies exposing interns to a realistic work setting through an internship could result in a more qualified talent pipeline and employee retention for employers.

Interns' self-efficacy is not only beneficial to the interns, but also to employer partners who desire these skills in employees. Self-efficacy is a return on investment for both the intern and employer partner. For students, the return on investment was applying or increasing their working knowledge and essential skills. The internship created a better understanding of how classroom learning could be applied in the workplace and to their career interests leading to interns providing value to the internship provider. Being able to gain industry experience was a meaningful opportunity for interns to apply essential skills. This was illustrated by a Midwest intern who stated that "Just working in a group in the future in a job you're going to have to work with others and communicate and this internship has been helped a lot with that." This was further supported by Participant N, a Southwest intern, who stated:

> My expectations for workplace and who we're working with have definitely been exceeded. We met great people. I feel like it definitely did exceed my expectations. I didn't think we were going to be doing as much work as we are doing but it's work we're learning from as we do it.

Internships as an experiential learning opportunity should increase student engagement and performance, learning, and development more than traditional classroom experiences (Brownell & Swaner, 2010). In the Orr et al. (2004) study, academy alumni stated that the program increased their interest in the related industries, and some had continued to work in the firms in which they had held internships. Students may be interested in an industry when they

join an academy or career pathway program and participating in a Future Ready program may strengthen their interest in the field.

The Future Ready internship program was designed for students to explore one industry in depth while learning about the career opportunities and educational requirements needed for the industry. “Many employers work with the academies in part because they believe that they will help increase and strengthen the long-term labor supply available for their industries” (Orr, Bailey, Hughes, Karp, & Kienzl, 2004, p. 54). In a 2004 study, Orr et al. found that 90% of NAM alumni continued to work in the academy-related industries after high school and after college. Moreover, 5% of working alumni still worked for their original internship employer or an academy-affiliated employer.

Employer partners value internships, as it can increase the retention of individuals as future employees. A survey conducted by the National Association of Colleges and Employers (2011a) showed employers who hosted internship programs had a retention rate of 75.8% when hiring, versus 60.7% of hires without an internship experience. Employers can observe how interns perform during an internship and recruit future employees based on those observations (Hurst & Good, 2010). Interns who perform well and provide valuable input lead to employers providing new opportunities for the interns or converting interns into employees within the organization.

While high school internships may not be an immediate return on investment for an employer, they can lead to long-term investments when building a talent pipeline as many employers convert interns into full-time hires (National Association of Colleges and Employers, 2011a). In addition to increasing the pool of qualified candidates, business have found they can reduce their cost per hire by recruiting interns; saving as much as $15,000 per person (Gault el

al., 2010). Other benefits found by Freifeld (2014), was that work-based learning led to the employer benefits such as reduced training and recruitment costs, intern productivity increased in the workplace, increase in employee morale and leadership skills, and positive exposure in the community. The perceived return on investment can vary by employer, yet building a talent pipeline is among the most commonly desired outcomes.

While employer partners may want interns to pursue a career within their company, providing the Future Ready internship is beneficial to interns as they transition from school to the workforce in any industry. While the researcher was not able to find studies describing a high school internship program as a workforce development strategy, there are small case reports detailing how internship programs vary in how they are structured and the important elements that should be imbedded. Keller (2012) found internships require commitment from all stakeholders, facilitate strong communication, connect classroom to career, and provide a sense of community to be impactful for interns. As a result, this program evaluation along with current internship studies have implications for both research and practice models in businesses and educators interested in building a future talent pipeline. The results from this study have direct implications for experiential learning in academic settings and businesses. The participant sample size was small (n = 56) in the Future Ready pilot internship program but was intended to provide the basis of examination and scholarship for traditional, group-based, or other internship programs.

The findings of this study suggest that it takes a collaborative effort of educators, businesses, nonprofits, and more to create a high-quality experiential learning opportunity as a workforce development strategy. This was further supported by Uhalde et al. (2006), who found a collaborative approach to education enhances labor productivity and economic growth through

improvements in skill development of the existing and future workforce. During the Future Ready internship program, interns grew as professionals, learned and practiced essential skills, and assessed their interests and abilities while establishing or refining their future career goals (ICG, 2017). For employers, the internship program increased the capability of enhancing the future workforce, building a talent pipeline, and providing employees with opportunities to support and inspire youth and grow more professionally in the process. Findings of this study indicated the Future Ready internship program is a promising model for collaboration between NAM, employer partners, and schools.

Recommendations for Further Research

This study is the one of the first to contribute information about high school internships and how they can be leveraged to help close the skills gap in the future workforce within the United States. This program evaluation suggests ways to create a streamlined process and seamless analysis of NAM Future Ready internship programs as a workforce development strategy. Further research will need to be conducted for continuous improvement of the NAM Future Ready internship program, thus improving other types of internships and work-based learning. Given the responses of participants, the findings of this study suggest numerous recommendations for educators, employers, and students involved with the practice of internships and other experiential learning activities.

Each pilot internship site had unique variables when the pilot program was implemented. One variable in the Southwest was that the program was implemented at a university campus instead of at the employer partner's campus, like the other two sites. A variable in the Southwest and Northeast was that the facilitator was not an employee of the employer partner and provided by external stakeholder groups; where in the Midwest, the facilitator was provided internally by

the employer partner. A variable in the Northeast was that students completed case studies versus a project of value for the employer like in the Southwest and Midwest. Another variable in the Northeast was that not all student interns came from NAM career academy programs like the other two sites. Lastly, a variable in each of the three sites was the length of planning prior to implementation. Each of these variables may have affected what elements student interns identified as important in the program and their perception of the internship overall.

It is recommended that multisite studies be conducted, as there were differences in how each program was planned and implemented, as well as differences in perceived benefits from students and employer partners. The researcher did not find any evidence in the previously conducted study by ICG that indicated any of these variables were researched. As Keller (2012) suggested, internships have a high degree of variability. Testing how the types of external factors, program interventions, and outputs contribute to the desired outcomes can lead to a systemized and sustainable impact. It is imperative for researchers to evaluate if or how these variables impact the program for future replication.

For a NAM Future Ready internship program to be an impactful workforce development strategy, specific elements will need to be identified and evaluated for impact. Without further research, it is unknown which elements of the Future Ready internship program lead to specific essential skill development. It is recommended that more data be collected in future studies and with a larger sample size to examine if the relationship becomes significant. This is further supported by “Learning partnerships” (2004), which recommended communities, industries, and professional organizations consistently evaluate the skills necessary in the workforce and devise strategies to teach them. Multisite studies are needed to fully understand if the variables at each site impact the perception student interns or employer partners have of the Future Ready

internship program. After multisite studies are conducted, the researcher recommends longitudinal studies to evaluate if NAM Future Ready internship programs result in a highly skilled and diverse workforce.

Further research is recommended to study if the NAM Future Ready program does serve to strengthen the available labor supply for participating industries. Longitudinal studies are needed to understand if Future Ready programs are a workforce development strategy. The researcher's recommendation for a longitudinal study is further supported by ICG, who conducted the study used in this program evaluation. ICG (2017) recommended a longitudinal impact study to measure long-term program outcomes and employment outcomes. Results indicated that incorporating additional personnel in an internship program created meaningful engagement opportunities. Specifically, when interns engage with employers and build relationships in multiple levels of business, they envision themselves in the workplace, and alignment between project deliverables and supporting personnel increased intern's retention of information. Hergert (2009) noted that while there is ample evidence for the practical benefit of internships, there has been less research into the exact role internships play in business. Not only should internships be structured and evaluated for meaningful engagement opportunities, but all work-based learning or experiential learning opportunities should be examined between business professionals and students.

Researching how relationships are established and maintained between students and business professionals, if there is a correlation between that relationship and student learning outcomes or student self-efficacy, will provide guidance on how stakeholders roles should be defined and structured. Employer partners from this study identified how short-term return on investment was achieved hosting a NAM Future Ready internship program. They also identified

the program as a long-term return on investment strategy. A longitudinal study of the employer partners' attitudes on the skill development of interns through NAM Future Ready pilot internship program should be evaluated for the return on investment and if those skills align with what employers seek in the workforce.

Interns who participate in NAM Future Ready internships may pursue careers within the company or industry who hosted the internship. Further study of interns' attitudes toward the Future Ready internship program and their skill development during, one-year post, and continuing over subsequent years should be evaluated for alignment with skills that employer partners desire in employees. Further research can be conducted in Future Ready pilot internship program to examine interns' skill development and self-efficacy then longitudinally studying interns' academic performance after the internship, if or what postsecondary education interns pursue, and type of employment obtained in following years. Longitudinal studies of both the employer partners who host a NAM Future Ready internship program and interns who participate in the program will provide more reliability and validity to the study when analyzing NAM Future Ready pilot internship program as a workforce development strategy.

Conclusion

This study shows that it is possible to create and deliver a high-quality internship program. In this study, all the NAM Future Ready pilot internship sites were structured in a similar fashion, although there was some variation in planning and implementation. Regardless of the variation, the students and employer partners believed the NAM Future Ready internship to be valuable and beneficial. The findings provided knowledge and understanding of how interns perceive the Future Ready internship program and the embedded program elements that interns identified as important for replication. The results confirmed employer partners' desire to

build a future talent pipeline and the need for greater collaboration around work-based learning and development of essential skills. The NAM Future Ready internship program was an innovative approach to workforce development, which led to both employer partners and students exhibiting satisfaction and recommendations for continued research of impact.

The research was comprehensively examined, including how academic knowledge was applied in the workforce, how specific elements impact students' perception of the program, and how high school internships can serve as a workforce development strategy. The study supported existing literature on the importance of work-based learning, identified specific experiential learning elements that impact student skill development and self-efficacy, and pioneered new research and recommendations on high school internships as a workforce development strategy. To achieve lasting success in closing the skills gap, silos of practice must be dissolved, and unprecedented alliances must be formed, nurtured, and sustained. Sectors such as businesses, nonprofits, educators, and policy makers must work together in a deliberate manner to increase influence in developing essential skills needed in the workforce. Experiential learning opportunities nurture talent in the existing and future workforce. As skills desired by employers consistently evolve, a collaborative approach to experiential learning will result in the United States being highly competitive in a global marketplace.

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Appendix A: Internship Assessment

Directions:
Please answer the following items based upon your experience observing the student intern. **It is important that you be objective and candid in your assessment of the intern, as your responses carry credibility to the process**. If you have not had the opportunity to observe the
student's skill level in a particular area, please respond N/A: "No Opportunity to Observe."

Any item receiving a score of 1 requires the supervisor to comment on the reason for this score.

SCORE	**1** Does Not Meet Expectations	**2** Approaches Expectations	**3** Meets Expectations	**4** Exceeds Expectations	**N/A** No Opportunity to Observe

Part I. Core College and Career Readiness Skills					
Collaboration & Teamwork that includes the following skills:	1	2	3	4	NA
Acts and collaborates as a team member					
Exhibits ability to work with diverse individuals					
Interacts with supervisors, clients, and teammates appropriately					
Communication that includes the following skills:	1	2	3	4	NA
Demonstrates effective verbal communication					
Constructs effective written communications					
Listens attentively and observes work environment					
Creativity & Innovation that includes the following skills:	1	2	3	4	NA
Incorporates creativity and innovation into tasks					
Critical Thinking and Problem Solving that includes the following skills:	1	2	3	4	NA
Thinks critically, formulates, and solves problems					
Demonstrates precision and accuracy					
Utilizes systems thinking					
Information Management that includes the following skills:	1	2	3	4	NA

Locates, comprehends, and evaluates information					
Applies information technology when completing tasks					
Initiative & Self Direction that includes the following skills:	1	2	3	4	NA
Demonstrates flexibility and adaptability when completing tasks					
Takes initiative, is self-directed and resourceful					
Asks appropriate questions					
Demonstrates awareness of own abilities and performance					
Comprehends career opportunities/requirements in the industry or field overall					
Understands career opportunities/requirements in the specific occupational area related to the internship or student project					
Professionalism & Ethics that includes the following skills:	1	2	3	4	NA
Demonstrates integrity and ethical behavior					
Manages time effectively; punctual					
Takes responsibility for learning; seeks to learn					
Prioritizes tasks					
Demonstrates persistence in completing activities					
Brings tasks and projects to completion					
Exhibits responsible and professional behaviors as defined by the industry or field					
Understands the culture, etiquette, and practices of the workplace or the project client's organization and knows how to navigate the organization					
Quantitative Reasoning that includes the following skills:	1	2	3	4	NA
Uses effective quantitative reasoning					

For each of the ratings above in Part I, evidence (examples of performance) can be provided for any rating in the online form, but examples must be provided for any skill with a rating of 1. If using the paper form to complete the assessment, please add required examples on additional pages marked to coincide with the rated dimension.

Appendix B: Presurvey

NAM Future Ready Pilot Internship Program Intern Survey, Summer 2017

PART I: PRE-INTERNSHIP

Introduction

The purpose of this survey is to evaluate the impact of the Future Ready pilot internship program (FRI) program created by NAM. Because you are currently participating in this internship program, we would like to include you in the study of the FRI program. As part of this important research, you are being asked to complete a survey which should take approximately 10–15 minutes. Please answer the following questions about your internship application experiences, reasons for participating in the FRI, and expectations about the FRI.

Your parent or guardian has signed a consent form and agree on your participation on this survey. Filling out this survey is voluntary, and you may choose to skip questions or stop taking the survey at any time. Your decision to participate or withdraw from the survey at any time, will not affect you at school or with NAM or with the internship company.

Your answers to these questions will be kept confidential to the extent permitted by law and all findings will be reported by summarizing data across interns – individual responses will not be reported. Your name and email address are only collected for the purpose of distributing the survey. No personal identification information will be reported. We will not share your individual responses with your coach/mentor, administrators, other interns, or your parent(s)/legal guardian(s). The study presents minimal risk to you. If you feel uncomfortable/upset during or after the survey and want to talk with someone, please let someone at NAM know.

Study participation helps build knowledge about how to support NAM students to prepare for postsecondary education and career. Where appropriate, NAM can use the information learned to adjust the Future Ready pilot internship program programming. We appreciate your inputs in the study.

If you have any questions about the study or your rights as a study participant, you or your parent/legal guardian can call ICG.

By selecting "I agree to take this survey," you agree that you understand the purpose of the study and agree to take the online survey. If you select "I do not agree to take this survey," you will not be presented with the option to take the survey. If you need to stop the online survey before completing it and return to it at a later time, you will be able to do so.

- ○ I read the instruction and agree to take this survey.
- ○ I do not agree to take this survey *(Skip to end of survey).*

BACKGROUND

1. **What was your grade level in May 2017?**

○ Grade 9	○ Grade 10	○ Grade 11	○ Grade 12

2. **What is your gender?**

○ Female	○ Male

3. **What is your racial or ethnic background?**

   - ○ Native American or Alaska Native
   - ○ Asian or Asian American
   - ○ Black or African American
   - ○ Native Hawaiian or Other Pacific Islander
   - ○ Hispanic, Latino or Spanish origin
   - ○ White
   - ○ Other/Multiracial
   - ○ I prefer not to answer

4. **What is the career strand of your academy? (Choose all that apply)**

   - ○ Academy of Engineering (AOE)
   - ○ Academy of Finance (AOF)
   - ○ Academy of Hospitality & Tourism (AOHT)
   - ○ Academy of Health Sciences (AOHS)
   - ○ Academy of Information Technology (AOIT)
   - ○ I don't know
   - ○ I have never participated in a NAM academy

5. **How long have you been participating in a NAM academy?**

   - ○ Less than a year
   - ○ One year
   - ○ Two years
   - ○ Three or more years
   - ○ I have never participated in a NAM academy.

6. **Is FRI your first experience in an internship? (*An internship is a minimum of 120 hours (or two 60 hours) and paid.)***

   - ○ Yes
   - ○ No

APPLYING FOR THE FUTURE READY PILOT INTERNSHIP PROGRAM INTERNSHIP

7. **How did you hear about the FRI program? (Please select only one)**
   - ○ From my teachers
   - ○ From a NAM/FRI session at my school
   - ○ From my NAM supervisor
   - ○ Other (please specify: _____)

8. **Please state the degree to which you agree or disagree with the following statement:**

I found the application process easy to understand and follow.
   - ○ Strongly Agree
   - ○ Agree
   - ○ Disagree
   - ○ Strongly Disagree

9. **Please state the degree to which you agree or disagree with the following statement:**

I had sufficient time to gather materials and complete the application Process.
   - ○ Strongly Agree
   - ○ Agree
   - ○ Disagree
   - ○ Strongly Disagree

10. **Please state the degree to which you agree or disagree with the following statement:**

I feel that my academy has fully prepared me for this internship experience.
   - ○ Strongly Agree
   - ○ Agree
   - ○ Disagree - (If selected, respondents will be asked to explain: In what ways do you not feel you were prepared?)
   - ○ Strongly Disagree - (If selected, respondents will be asked to explain: In what ways do you not feel you were prepared?)

11. **Did you receive any support in preparing for the internship application and/or interview?**
   - ○ Yes – Q12 (If Yes, respondents will be directed to Q12)
   - ○ No – Q13 (If No, respondents will be directed to Q13)

12. **What supports did you receive? How helpful were they? Please explain.**

13. **(Q12 No) What support would you have liked to receive during the application process?**

(Q12 Yes) What additional support would you have liked to receive during the application process?

14. **In your opinion, how can the application process be improved?**

EXPECTATIONS FOR THE FUTURE READY PILOT INTERNSHIP PROGRAM INTERNSHIP

15. **Please rate your level of familiarity with the [Company Name] on the following items.**

	Extremely familiar	Moderately familiar	Somewhat familiar	Slightly familiar	Not familiar at all
The services provided by the company					
The job opportunities provided by the company					

16. **Why did you choose to participate in the FRI internship program? (Please select all that apply)**

- ○ My parent(s) wanted me to.
- ○ My teacher asked me to.
- ○ The internship program pays well.
- ○ The internship program fits my career goals.
- ○ The timeframe of the internship program fits my summer schedule.
- ○ The internship program will provide valuable work experience.
- ○ I will be able to obtain references for future job opportunities through the internship.
- ○ I will be able to meet peers with similar interests.
- ○ The internship program will help me learn more about the world of work.
- ○ The internship program will allow me to apply knowledge learned in my classes.
- ○ The internship program will get me a foot in the door at <Company Name>.
- ○ I will be able to develop and build new skills through the internship.
- ○ The internship program will help me strengthen my resume.
- ○ The internship program will make me more competitive in future job applications.
- ○ The internship program will make me more competitive for college applications.
- ○ Other (please explain_____)

17. **What are your objectives for participating the FRI internship program? Please list up to four objectives.**

Objective (up to 4)
1
2
3
4

18. **What concerns do you have now, at the beginning of the internship?**

Thank you. Your time and answers are greatly appreciated.

Appendix C: Postsurvey

NAM Future Ready Pilot Internship Program Intern Survey, Summer 2017

PART II: POST-INTERNSHIP SURVEY

Reminder

You may have completed a similar survey at the beginning of this internship. We are asking a few more questions at the end of the internship to learn about your experience. We might continue to send out surveys in the next 12–24 months to learn how FRI impacts your college/career plans.

Introduction

The purpose of this survey is to evaluate the impact of the Future Ready pilot internship program (FRI) program created by NAM. Because you are currently participating in this internship program, we would like to include you in the study of the FRI program. As part of this important research, you are being asked to complete a survey which should take approximately 10–15 minutes. Please answer the following questions about your internship application experiences, reasons for participating in the FRI, and expectations about the FRI.

Your parent or guardian has signed a consent form and agree on your participation on this survey. Filling out this survey is voluntary, and you may choose to skip questions or stop taking the survey at any time. Your decision to participate or withdraw from the survey at any time, will not affect you at school or with NAM or with the internship company.

Your answers to these questions will be kept confidential to the extent permitted by law and all findings will be reported by summarizing data across interns – individual responses will not be reported. Your name and email address are only collected for the purpose of distributing the survey. No personal identification information will be reported. We will not share your individual responses with your coach/mentor, administrators, other interns, or your parent(s)/legal guardian(s). The study presents minimal risk to you. If you feel uncomfortable/upset during or after the survey and want to talk with someone, please let someone at NAM know.

Study participation helps build knowledge about how to support NAM students to prepare for postsecondary education and career. Where appropriate, NAM can use the information learned to adjust the Future Ready pilot internship program programming. We appreciate your inputs in the study.

If you have any questions about the study or your rights as a study participant, you or your parent/legal guardian can call ICG.

By selecting "I agree to take this survey," you agree that you understand the purpose of the study and agree to take the online survey. If you select "I do not agree to take this survey," you will not be presented with the option to take the survey. If you need to stop the online survey before completing it and return to it at a later time, you will be able to do so.

- ○ I read the instruction and agree to take this survey.
- ○ I do not agree to take this survey *(Skip to end of survey).*

YOUR EXPERIENCE WITH THE FUTURE READY PILOT INTERNSHIP PROGRAM INTERNSHIP

1. **Briefly describe your responsibilities during the internship.**
2. **Were your objectives for participating in the FRI program met during the FRI program? In the following matrix, please rate to what extent each of your objectives was met through your internship. In the last column, please explain your response.**

To what degree was each of the following objectives met . . .	The Objective was met . . .
1. Pre-filled from the pre-internship survey	○ Fully ○ Partially – ((If selected, respondents will be asked to explain: why the objective was not fully met?) ○ Not met – (If selected, respondents will be asked to explain: why the objective was not fully met?)
2. Pre-filled from the pre-internship survey	○ Fully ○ Partially – ((If selected, respondents will be asked to explain: why the objective was not fully met?) ○ Not met – (If selected, respondents will be asked to explain: why the objective was not fully met?)
3. Pre-filled from the pre-internship survey	○ Fully ○ Partially – ((If selected, respondents will be asked to explain: why the objective was not fully met?) ○ Not met – (If selected, respondents will be asked to explain: why the objective was not fully met?)
4. Pre-filled from the pre-internship survey	○ Fully ○ Partially – ((If selected, respondents will be asked to explain: why the objective was not fully met?) ○ Not met – (If selected, respondents will be asked to explain: why the objective was not fully met?)

3. **Please indicate the degree to which you agree or disagree with the following statements about the FRI internship experience.**

	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Does not Apply
The work I performed was challenging.					
The work I performed was interesting or stimulating					
I was provided adequate directions and/or training for how to complete my work for the project(s).					
I received regular and constructive feedback on my progress and abilities.					
The internship provided ample opportunities for learning.					
I worked with people from diverse backgrounds during the internship.					
My mentor/coach was available and accessible when I had questions/concerns.					
I had a good working relationship with other interns/co-workers.					
I learned new skills and knowledge from my fellow interns					
I applied skills and knowledge I learned in NAM Academy courses to my internship experience.					
I applied skills and knowledge I learned at school to my internship experience.					
This experience is related to my academic discipline and/or career goal.					
(the following is about the outcome of the internship)					
The internship experience gave me a realistic preview of a career field.					
This experience has helped prepare me for college.					
This experience has helped prepare me for the workplace.					

As a result of my internship, I have a better understanding of concepts, theories, and skills that I have been learning about in some of my high school classes.					
As a result of my recent internship experience, I feel that I am better prepared for pursuing a career					

4. **Please indicate the degree to which you agree or disagree with the following statements about the FRI internship experience.**

I feel that my academy fully prepared me to be successful in this internship experience.

- ○ Strongly Agree
- ○ Agree
- ○ Disagree – (If selected, respondents will be asked to explain: In what ways do you not feel you were prepared?)
- ○ Strongly Disagree – (If selected, respondents will be asked to explain: In what ways do you not feel you were prepared?))

5. **In the following matrix, please rate the level of improvements on your skills, abilities, and knowledge for each item in the list comparing before and after your internship experience.**

As a result of my recent internship experience, I have significantly improved my level of knowledge and/or skill in:	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Does not Apply
verbal communication skills					
written communication skills					
interpersonal skills (such as working well with other people or on a team)					
problem-solving abilities					
technology skills (including learning new software)					
presentation skills					
quantitative skills (such as math or accounting skills)					
knowledge of business operations					
time management skills					

Sense of your career skills, interests, and values					
Skills and knowledge needed for success in chosen field					
Strong work ethic					
Extent of professional network					
Other (specify _____)					

6. **Would you consider a career in one of the fields you were exposed to during your internship?**
   - ○ Yes (explain_____)
   - ○ No (explain_____)
   - ○ Not sure (explain_____)

7. **Would you consider working for the company in which you had your FRI internship?**

1	2	3	4	5	6	7	8	9	10
Not at all									Definitely

8. **What problems did you encounter during the internship? How did you handle those problems?**
9. **If you could change one thing about the internship program, what would you change?**
10. **Overall, how satisfied were you with your mentor/coach?**
    - ○ Very satisfied
    - ○ Somewhat satisfied
    - ○ Neither satisfied nor dissatisfied
    - ○ Somewhat dissatisfied
    - ○ Very dissatisfied
11. **Overall, how satisfied were you with the NAM facilitators?**
    - ○ Very satisfied
    - ○ Somewhat satisfied
    - ○ Neither satisfied nor dissatisfied
    - ○ Somewhat dissatisfied
    - ○ Very dissatisfied
12. **Overall, how satisfied were you with your FRI internship?**
    - ○ Very satisfied
    - ○ Somewhat satisfied
    - ○ Neither satisfied nor dissatisfied

- ○ Somewhat dissatisfied
- ○ Very dissatisfied

13. **How likely would you recommend this internship to other students?**

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

14. **How likely is it that you would recommend working for <Company Name> to a friend or fellow student?**

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

15. **During the internship, to what extent did you feel like a part of the company and contributing to the company as employees?**

1	2	3	4	5	6	7	8	9	10
Not at all likely									Extremely likely

16. **What suggestion do you have for other students who would like to participate the FRI program?**

Thank you. Your time and answers are greatly appreciated.

Appendix D: Intern Focus Group Questions

Introduction

Please introduce yourself, your name, and how long you've been involved in NAM (i.e., since what grade?).

Experience with Future Ready pilot internship program

1. Have you participated any internship prior to NAM Future Ready internship?
    a. If yes, what are the differences between your previous internship and NAM Future Ready pilot internship program?
2. Are you aware of traditional internships (six-week long) offered through your academies or local companies?
    a. What made you choose NAM Future Ready pilot internship program instead of a traditional internship?
    b. For [COMPANY NAME] interns: [COMPANY NAME] offers both a traditional (six-week long) and NAM Future Ready pilot internship program (three-week long) internship. Why did you choose the NAM Future Ready pilot internship program internship over the traditional internship?
3. What did you do to prepare for this internship?
    a. Did your classes at the academy or at school help to prepare you for the internship? How so?
    b. How well do you think you were prepared? Please elaborate.
4. Before you started the internship, what were your expectations for the internship?
    a. What were your expectations for . . .
        i. . . . the work you would do?
        ii. . . . what you would learn?
        iii. . . . the people you would interact with?
        iv. . . .other aspects?
    b. How well has the internship met your expectations? Please elaborate.
5. Which aspects of the internship did you find to be the most valuable? Why?
    a. Which aspects provided the greatest learning opportunities? Please elaborate.
    b. Which aspects did you enjoy the most? Why?
6. Which aspects of the internship did you like least? Why?
7. In what ways, if any, did the NAM Future Ready internship provide you with real world working experience?
8. In what ways, if any, was the NAM Future Ready internship different from real world work?
9. How helpful was your mentor/coach during the internship?
    a. In what ways did your mentor/coach support you throughout the internship?
10. How helpful was the NAM Future Ready pilot internship program facilitator during the internship?
    a. In what ways did the NAM Future Ready pilot internship program facilitator support you throughout the internship?

11. How did your NAM Future Ready internship experience affect your consideration of a career in this field?
12. What would you recommend to improve the NAM Future Ready internship program?
    a. In terms of the program scheduling?
    b. In terms of the overall project?
    c. In terms of the daily work responsibilities?
    d. In terms of staffing?
13. What problems did you encounter during the internship? How did you handle those problems?
14. If you could change one thing about the internship program, what would you change?
15. What are your recommendations for future NAM Future Ready interns to have a successful experience?
16. Do you have any other comments regarding your internship program?

Appendix E: Intern Focus Group Protocol

Facilitator Guidelines:

- ➢ Introduce yourself and/or leaders of the focus group as representatives of ICG and describe your roles in supporting the meeting (i.e., facilitator).

- ➢ Intern Assent and Parent Consent: Only interns with signed parent consent can participate in the focus group. Confirm that you have collected signed consent forms for each participating student and walk interns through their assent to participate.

- ➢ Briefly discuss the purpose of the focus group: *Those sponsoring the Future Ready pilot internship program would like to know what it is like to be a part of the program. Particularly, they are interested in your internship experience and how the experience affects your college and career plans. The purpose of this focus group is to get a variety of views about the program, so that we can gather information about activities to help plan for the future. People can agree or disagree with comments, but only one person can speak at a time. The session will take approximately 45–60 minutes.*

- ➢ Convey to each participant our confidentiality policy: *(1) the focus group is voluntary; (2) you can decline to answer any questions, or you can stop participating in the focus group at any time – participation will not impact you at NAM Academy or at school; (3) the information will be held in confidence to the extent permitted by law by the study team who have signed confidentiality agreements ensuring the protection of data; (4) focus group data will be maintained in secure areas; and (5) please respect others' privacy by not sharing any information outside of the focus group.*

- ➢ Ask permission to record the focus group: *In order to capture the discussion, I would like to record the session. Only the study team members will have access to the recording. If at least one person chooses not to have the focus group recorded, we will not record the session but will take notes. We will not include your name(s) in these notes. Any information that can be used to identify an intern will be removed from transcripts prior to being shared.*

- ➢ Ask if they have any questions for you before you begin. Review and ask participants to sign the assent form. Parent permission forms will be collected prior to the focus group.

- ➢ Each focus group should have six to ten participants. The focus group is open to any FRI interns.

Materials

- Name tag (first names only), pen for each participant
- Paper (to write down their thoughts)

Appendix F: Mentor Focus Group Protocol

Facilitator Guidelines:

- Introduce yourself and/or leaders of the focus group as representatives of ICG and describe your roles in supporting the meeting (i.e., facilitator).

- Briefly discuss the purpose of the focus group: *Those sponsoring the NAM Future Ready pilot internship program would like to know what it is like to be a part of the program. Particularly, they are interested in your experience as a mentor/coach. The purpose of this focus group is to get a variety of views about the program, so that we can gather information about activities to help plan for the future. People can agree or disagree with comments, but only one person can speak at a time. The session will take approximately 45-60 minutes.*

- Convey to each participant our confidentiality policy: *(1) the focus group is voluntary; (2) you can decline to answer any questions, or you can stop participating in the focus group at any time; (3) the information will be held in confidence to the extent permitted by law by the study team who have signed confidentiality agreements ensuring the protection of data; (4) focus group data will be maintained in secure areas; and (5) please respect others' privacy by not sharing any information outside of the focus group.*

- Ask permission to record the focus group: *In order to capture the discussion, I would like to record the session. Only the study team members will have access to the recording. If at least one person chooses not to have the focus group recorded, we will not record the session but will take notes. We will not include your name(s) in these notes. Any information that can be used to identify an intern will be removed from transcripts prior to being shared.*

- Ask if they have any questions for you before you begin.

Materials

- Name tag (first names only), pen for each participant
- Paper (to write down their thoughts)

Appendix G: Mentor Focus Group Questions

Introduction

1. Can you begin by providing a quick introduction including your name, job title, and years of experience at [COMPANY NAME]?

Experience with Future Ready pilot internship program

2. What made you decide to participate to be a mentor/coach for the Future Ready pilot internship program internship program?
    a. What is it about this particular NAM Future Ready pilot internship program project that caught your attention?
    b. Have you worked with high school interns at [COMPANY NAME] prior to NAM Future Ready internship?
        i. If yes, what program(s) did you participate?
        ii. If yes, based on your experience, what are the differences between NAM Future Ready pilot internship program and other internship programs?
    c. How does your experience with NAM Future Ready pilot internship program relate to your job, if at all? What about your professional and/or personal growth?
    d. Did you volunteer to participate as a mentor/coach in NAM Future Ready pilot internship program voluntary or were you asked to participate by [COMPANY NAME]?
3. What are your primary responsibilities as a NAM Future Ready pilot internship program mentor/coach?
    a. In what ways do you interact with the interns?
        i. What are the interns' responsibilities? How do you help the interns satisfy their responsibilities?
4. Can you walk me through a typical day in the NAM Future Ready pilot internship program internship program, from your perspective?
    a. How much time have you devoted to the NAM Future Ready pilot internship program internship program so far?
        i. Is this more or less than what you expected or were told at the beginning of the process? How so?
5. What supports did you receive to successfully execute the role of mentor/coach?
        i. What supports were provided from the company?
        ii. What supports were provided from NAM/NAM facilitators?
        iii. What support were you hoping to receive but did not receive?
6. What were your expectations for the NAM Future Ready pilot internship program prior to starting?
    a. Expectations for your role as a mentor/coach?
    b. Expectations for the student interns?
7. What are your impressions of the NAM Future Ready pilot internship program now, near or at the conclusion of the program?
    a. Impressions of the NAM Future Ready pilot internship program in terms of . . .

i. The students?
    - Did interns possess the basic skills and knowledge needed to fulfill their internship responsibilities?
    - How well prepared do you think the students were when they started the internship?
    - How do you think students can be better prepared for the internship?

ii. The caliber of the students' work?
iii. The structure of the internship program (e.g., internship length, schedule)?
iv. The level of organization of the internship program?
v. The NAM facilitators?

b. In what ways did your expectations for the NAM Future Ready pilot internship program align with your actual experiences with the program?
    i. How have your actual experiences exceeded your expectations?
    ii. How have your actual experiences met your expectations?
    iii. How have your actual experiences not met your expectations?

8. In what ways do you believe that the interns have benefited from participating in the NAM Future Ready pilot internship program internship program?
    a. What project activities and/or student experience have you observed that are helping student develop skills to be college and career ready?
9. In what ways do you believe that [COMPANY NAME] has benefited from sponsoring the NAM Future Ready pilot internship program internship program?
    a. How was the project that the interns worked on beneficial to the company as a whole?
10. What were the challenges you encountered during the internship program? How did you handle those challenges?
11. Would you volunteer to be a mentor/coach for NAM Future Ready pilot internship program next year, should [COMPANY NAME] decide to sponsor NAM Future Ready pilot internship program again?
12. In what ways could the NAM Future Ready pilot internship program be improved in future years?
13. One goal of the NAM Future Ready pilot internship program is to scale the program up---across multiple sites throughout the country. What advice can you provide regarding important factors to consider when scaling up this program?
14. How likely would you recommend your coworkers to be a volunteer mentor/coach for the Future Ready pilot internship program?

    1 2 3 4 5 6 7 8 9 10

    Not at all likely Extremely likely
15. Do you have any final thoughts regarding your experiences, so far, with the Future Ready pilot internship program?

Appendix H: Employer Partner Focus Group Protocol

Facilitator Guidelines:

- Introduce yourself (and other interviewer, as applicable) as representatives of ICG and describe your role(s) in supporting the meeting (i.e., facilitator).

- Briefly discuss the purpose of the interview/focus group: *Those sponsoring the NAM Future Ready pilot internship program would like to know what it is like to be a part of the program. Particularly, they are interested in your experience as an employer and NAM Future Ready leader(s). The purpose of this interview/focus group is to get a variety of views about the program, so that we can gather information about activities to help plan for the future.* If focus group: *People can agree or disagree with comments, but only one person can speak at a time. The session will take approximately 45-60 minutes.*

- Convey to each participant our confidentiality policy: *(1) the interview/focus group is voluntary; (2) you can decline to answer any questions, or you can stop participating in the interview/focus group at any time; (3) the information will be held in confidence to the extent permitted by law by the study team who have signed confidentiality agreements ensuring the protection of data; (4) interview/focus group data will be maintained in secure areas; and [if focus group] (5) please respect others' privacy by not sharing any information outside of the focus group.*

- Ask permission to record the interview focus group: *In order to capture the discussion, I would like to record the session. Only the study team members will have access to the recording.* If focus group: *If at least one person chooses not to have the focus group recorded, we will not record the session but will take notes. We will not include your name(s) in these notes. Any information that can be used to identify an intern will be removed from transcripts prior to being shared.*

- Ask if they have any questions for you before you begin.

Appendix I: Employer Partner Focus Group Questions

1. Can you begin by providing a quick introduction to your company and your position within your company?
    a. What is your role within [COMPANY NAME]?
        i. What are your primary responsibilities in that capacity?
2. What is [COMPANY NAME]'s relationship with NAM?
    a. Have you partnered together on initiatives in the past? Which ones? For how long have you been partnered on initiatives?
    b. Are you connected to NAM staff or board members?
3. How did [COMPANY NAME] get involved in the Future Ready pilot internship program?
    a. Why did [COMPANY NAME] partner with NAM on the Future Ready pilot internship program?
    b. In what ways does the NAM Future Ready pilot internship program align with [COMPANY NAME]'s goals or mission?
    c. Does [COMPANY NAME] sponsor other internship programs for high school students in addition to NAM Future Ready pilot internship program?
        - If yes, what are the differences between NAM Future Ready pilot internship program and other internship programs?
            - Schedule
            - Staffing
            - Costs
            - Project/work scope for interns
4. What was the development process like, from your perspective, for the NAM Future Ready pilot internship program internship program?
    a. What was the timeline for development?
    b. What planning has been required to bring the NAM Future Ready pilot internship program internship program to fruition?
5. What resources has [COMPANY NAME] devoted to the development and implementation of the NAM Future Ready pilot internship program?
    a. How many employees have been involved in the development and implementation of the internship?
    b. About how much time has your staff invested in the development and implementation of the NAM Future Ready pilot internship program at [COMPANY NAME]?
        - Is this more or less than what you expected at the beginning of the process? How so?
    c. What other resources did [COMPANY NAME] provide to support the internship program?
        - Is this more or less than what you were expecting? How so?

    d. What logistical support, if any, did [COMPANY NAME] provide in order to implement the internship program?
6. Were you involved at all in the selection of interns for the NAM Future Ready pilot internship program at [COMPANY NAME]?
    a. If yes, can you tell me more about the process and criteria you used when selecting interns for the program? How were those processes and criteria determined?
    b. In what ways did you market the NAM Future Ready pilot internship program internship program at [COMPANY NAME] to prospective interns?
7. What were the challenges you encountered during the development and implementation of the program? How did you handle those challenges?
8. What were your expectations of how [COMPANY NAME] would benefit from the NAM Future Ready pilot internship program internship program and how well have these expectations been met?
    a. Short-term benefits?
    b. Long-term benefits?
9. In what ways have your expectations for the NAM Future Ready pilot internship program aligned with the reality of the program's functioning? How so?
10. How were company employees selected to be involved in the NAM Future Ready pilot internship program?
    a. How do you think company employees have benefited from the NAM Future Ready pilot internship program?
11. How do you believe student participants have benefited from the NAM Future Ready pilot internship program?
12. What has been [COMPANY NAME]'s experience working with NAM on the NAM Future Ready pilot internship program?
    a. What are your impressions of the development processes?
    b. What can NAM do differently in the future to strengthen the development or implementation of the internship program?
    c. In what ways could the Future Ready pilot internship program model be improved?
13. Does your company have plans to stay connected with the interns?
14. Are there other opportunities for the interns to engage with the company after high school?
15. In what ways has the NAM Future Ready pilot internship program internship prepared interns future work with [COMPANY NAME]?
16. How likely would you recommend the NAM Future Ready pilot internship program to other companies that would like to sponsor internship for high school students?

    1 2 3 4 5 6 7 8 9 10
    Not at all likely Extremely likely

17. Do you have any final thoughts regarding your experiences, so far, with the NAM Future Ready pilot internship program?

Appendix J: Facilitator and Logistics Coordinator Focus Group Protocol

Facilitator Guidelines:

- Introduce yourself and/or leaders of the focus group as representatives of ICG and describe your roles in supporting the meeting (i.e., facilitator).

- Briefly discuss the purpose of the focus group: *Those sponsoring the NAM Future Ready pilot internship program would like to know what it is like to be a part of the program. Particularly, they are interested in your experience as a NAM facilitator. The purpose of this focus group is to get a variety of views about the program, so that we can gather information about activities to help plan for the future. People can agree or disagree with comments, but only one person can speak at a time. The session will take approximately 45-60 minutes.*

- Convey to each participant our confidentiality policy: *(1) the focus group is voluntary; (2) you can decline to answer any questions, or you can stop participating in the focus group at any time; (3) the information will be held in confidence to the extent permitted by law by the study team who have signed confidentiality agreements ensuring the protection of data; (4) focus group data will be maintained in secure areas; and (5) please respect others' privacy by not sharing any information outside of the focus group.*

- Ask permission to record the focus group: *In order to capture the discussion, I would like to record the session. Only the study team members will have access to the recording. If at least one person chooses not to have the focus group recorded, we will not record the session but will take notes. We will not include your name(s) in these notes. Any information that can be used to identify an intern will be removed from transcripts prior to being shared.*

- Ask if they have any questions for you before you begin.

Materials

- Name tag (first names only), pen for each participant
- Paper (to write down their thoughts)

Appendix K: Facilitator and Logistics Coordinator Focus Group Questions

1. Please tell me a little bit about your role at NAM.
    a. What is your job title?
    b. What are your responsibilities?
2. What is your involvement in the Future Ready pilot internship program internship program?
    a. At what stage did you first get involved?
    b. Which Future Ready pilot internship programs have you been involved in facilitating?
3. In your opinion, what are the differences between a traditional NAM internship program and the NAM Future Ready pilot internship program internship program?
4. Can you walk me through the process NAM has used to launch the NAM Future Ready pilot internship program internship program?
    a. What logistics has NAM had to coordinate?
    b. How did NAM recruit [COMPANY NAME] for the NAM Future Ready pilot internship program?
        i. What was NAM's relationship with [COMPANY NAME] prior to the NAM Future Ready pilot internship program?
            1. Have you partnered together on initiatives in the past? Which ones?
    c. What is the overall project that students in the internship are working on?
        i. Do you know the origins of this project?
        ii. Do you have a sense of how this project is expected to help [COMPANY NAME]?
        iii. Was NAM involved in working with the company to formulate an appropriate project for the internship program? How so?
5. What has the partnership been like with [COMPANY NAME]?
    a. What are each partner's respective roles and responsibilities?
    b. What has communication been like about this project?
    c. What has it been like to coordinate logistics with [COMPANY NAME]?
6. What has been the process for identifying and recruiting students for the NAM Future Ready pilot internship program?
    a. How were students recruited?
    b. When did recruitment start? How long did it last?
    c. What were the goals for recruitment in terms of student numbers, skillsets, and other criteria? To what extent were the goals achieved?
    d. How has NAM played a role in recruitment or selection of students, if any?
        i. Did NAM provide any information sessions about the NAM Future Ready pilot internship program?
        ii. Did NAM provide any support to students in completing and submitting the internship application?
        iii. Another role?

    e. How has [COMPANY NAME] played a role in recruitment or selection of students, if any?
        i. Did they provide any information sessions about the NAM Future Ready pilot internship program?
        ii. Did they provide any support to students in completing and submitting the internship application?
    f. How have schools/the school district played a role in recruitment or selection of students, if any?
        i. Did they provide any information sessions about the NAM Future Ready pilot internship program?
        ii. Did they provide any support to students in completing and submitting the internship application?
        iii. Another role?
    g. What challenges/difficulties were encountered during recruitment? How were they handled? Any lessons learned?
7. What resources did [COMPANY NAME] put into the NAM Future Ready pilot internship program?
    a. Were such resources more or less than originally planned?
    b. What would you consider a reasonable return on investment for [COMPANY NAME]?
    c. What types of resources, exactly?
        i. Financial resources?
        ii. Staffing?
        iii. Time?
        iv. Other resources?
8. What resources did NAM invest in the NAM Future Ready pilot internship program?
    a. Where such resources more or less than originally planned?
    b. What would you consider a reasonable return on investment for NAM?
    c. What types of resources, exactly?
        i. Financial resources?
        ii. Staffing?
        iii. Time?
        iv. Other resources?
9. What are your expectations for how [COMPANY NAME] is benefiting from the NAM Future Ready pilot internship program?
    a. Short-term
    b. Long-term
10. What are your expectations for how NAM is benefiting from the NAM Future Ready pilot internship program?
    a. What objectives did NAM hope to achieve by launching the NAM Future Ready pilot internship program?
    b. Has NAM achieved these objectives through the NAM Future Ready pilot internship program at [COMPANY NAME]? How so?

11. What are your expectations for how the interns are benefiting from the NAM Future Ready pilot internship program?
    a. What types of benefits?
        i. Academically?
        ii. Professionally?
        iii. Other ways?
    b. What project activities and/or student experience have you observed that are helping the interns develop skills to be college and career ready?
12. What challenges/difficulties have you encountered during the program development and implementation? How have they been handled? Any lessons learned?
    a. Related to logistics?
    b. Related to the partnership with [COMPANY NAME]?
    c. Related to the student participants?
    d. Anything else?
13. Do you have any ideas about how to improve the development and implementation of the Future Ready pilot internship program experience in the future?
    a. Regarding logistics?
    b. Regarding student identification and recruitment?
    c. Regarding company identification and recruitment?
    d. Regarding building the partnership with the company?
    e. Any other thoughts?
14. Are there any challenges that you've observed through this experience that could impede expansion or replication of the NAM Future Ready pilot internship program in new sites?
15. Do you have any final thoughts regarding your experiences with the NAM Future Ready pilot internship program?

Thank you for your time.

Appendix L: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

> As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

> **What does "fraudulent" mean?**
>
> "Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.
>
> **What is "unauthorized" assistance?**
>
> "Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:
>
> - Use of unauthorized notes or another's work during an online test
> - Use of unauthorized notes or personal assistance in an online exam setting
> - Inappropriate collaboration in preparation and/or completion of a project
> - Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.

Digital Signature

DeAira Handugan

Name

December 6, 2019

Date